

AND UNUSUAL WEATHER PHENOMENA WITH LATE REPORTS AND CORRECTIONS



Cover: A Cumulonimbus cloud just southeast of Asheville, NC. This storm produced heavy rainfall amounts and strong straight-line winds in the Fairview area. (*Photograph courtesy of Stuart Hinson, Meteorologist, NCDC, Asheville, NC*)

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STORM DATA

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The Storm Data and Unusual Weather Phenomena narratives and Hurricane/Tropical Storm summaries are prepared by the National Weather Service. Monthly and annual statistics and summaries of tornado and lightning events resulting in deaths, injuries, and damage are compiled by cooperative efforts between the National Climatic Data Center and the Storm Prediction Center.

STORM DATA contains all confirmed information on storms available to our staff at the time of publication. However, due to difficulties inherent in the collection of this type of data, it is not all-inclusive. Late reports and corrections are printed in each edition.

Maps of the National Weather Service County Warning Areas which are used in the Storm Data and Unusual Weather Phenomena section will be printed in all editions.

Except for limited editing to correct grammatical errors, materials submitted are generally published as received.

Note: "None Reported" means that no severe weather occurred and "Not Received" means that no reports were received for this region at the time of printing.

Subscription, pricing, and ordering information is available from:

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The editors of **STORM DATA** solicits your help in acquiring photographs (prints or slides; black and white, or color), maps, clippings, etc. of significant or unusual weather events (past or present). These could be for use in the "Outstanding Storms of the Month" section of **STORM DATA**. We request our subscribers or other interested persons to mail such items to:

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Any such items received by the editor will be for use in **STORM DATA** only. Any other use will be with the permission of the owner of said items. Materials submitted will be returned if requested in the original submission.

"I certify that this is an official publication of the National Oceanic and Atmospheric Administration and is compiled from information received at the National Climatic Data Center Asheville, North Carolina 28801-2733."

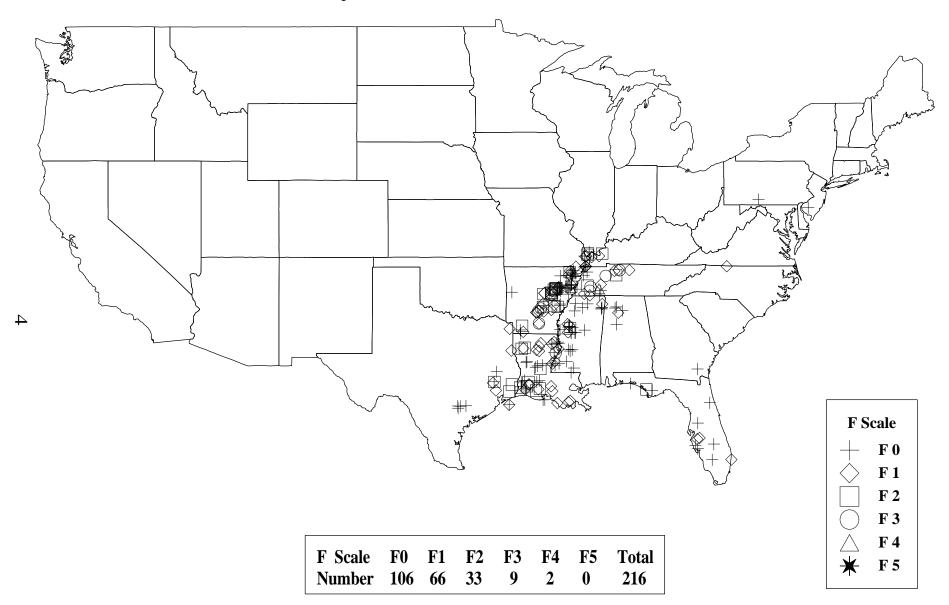
Thomas R. Karl Director,

National Climatic Data Center

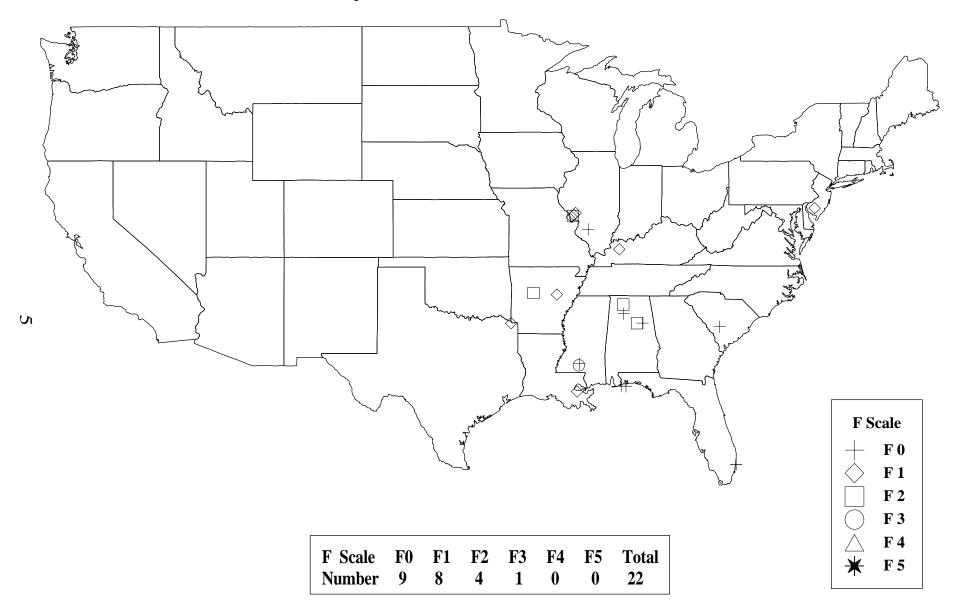
The Cyclone Track Map which usually appears on this page is not available for February 1999.

Should the data become available in the future, a cyclone track map will be produced and printed in a subsequent issue.

January 1999 Confirmed Tornadoes



February 1999 Confirmed Tornadoes



OUTSTANDING STORMS OF THE MONTH

The "Outstanding Storm of the Month" which appears on Page 5 is not available for this month.

The Editors of the **Storm Data** Publication solicit your help acquiring materials such as photographs, newspaper articles, graphs, charts, maps, etc. of severe weather events or any unusual weather phenomena. Any such items received by the editors may be for use in the "Outstanding Storm of the Month" section. Materials will be returned if requested in the original submission. Please send any such materials to the address below. If you have any questions, comments or suggestions, please feel free to contact us at the address below.

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		Time Path Local/ Length				Number of Persons		ated	February 1999	
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per Killed	sons Injured	Dama Property	age Crops	Character of Storm	
ALABAMA, North	Central	1						-		
ALZ044		gomery								
	01	0000CST			0	0	0	0	Drought	
	28 The m	2359CST onthly rainfal	l for February	was 1 11 inche	s That is th	e lowest m	onthly total f	or Februs	ary ever recorded.	
ALZ006	Madi	•	i ioi i cordary	was 1.11 mene	5. That is th	c lowest in	ionuny totai i	or reorue	ny ever recorded.	
	06	1500CST			0	0	0	0	Excessive Heat	
		_	emperature of	69 degrees was	recorded at	the Hunts	ville Internati	ional Airp	oort.	
ALZ024	Jeffer	son								
	06	1500CST		76 4	0	0	0	0	Excessive Heat	
ALZ006	Madi:	_	emperature of	76 degrees was	s recorded at	the Birmi	ngnam intern	апопат А	irport.	
ALZOO	07	1500CST			0	0	0	0	Excessive Heat	
				73 degrees was	-	-	-	-		
ALZ024	Jeffer	son								
	07	1500CST			0	0	0	0	Excessive Heat	
Tugooloogo Countr	The re	cord high tem	perature of 76	degrees was ti	ed at the Bir	mingham l	International	Airport.		
Tuscaloosa County	00	150CCCT			0	0	0	0	(99.0) E-II	
Tuscaloosa	09 Nickel	1506CST sized hail wa		he city of Tusca	0 aloosa.	0	0	0	Hail (0.88)	
Etowah County			1	•						
Gadsden	09	1900CST			0	0	20K	0	Flash Flood	
	Locali	2000CST	nounts of three	a inchae acrose	the city of C	adedan in	a chart pario	d of time	produced some flooding. Several cars	
				ces had water in	•	Jausueli III	a short period	d of time	produced some flooding. Several cars	
Marshall County										
Guntersville	09	1930CST			0	0	12K	0	Lightning	
				d entered the C No injuries we		Wash. The	e lightning da	amaged h	eavy machinery and all the computer	
ALZ006	Madi		ат аррпанесь.	110 mjunes we	re reported.					
	11	1500CST			0	0	0	0	Excessive Heat	
		_	emperature of	75 degrees was	s recorded at	the Hunts	ville Internati	ional Airp	port.	
ALZ024	Jeffer	son								
	11	1500CST		4	0	0	0	0	Excessive Heat	
ALZ044		gomery	perature of 79	degrees was ti	ed at the bir	mingnam i	mternationar	Airport.		
ALZOTT	11	1500CST			0	0	0	0	Excessive Heat	
				82 degrees was				v	Excessive freue	
Franklin County										
Red Bay	27	1740CST			0	0	10K	0	Thunderstorm Wind (G55)	
	Trees	1745CST were downed		v High School	. One build	ling was d	lamaged in t	he city o	f Red Bay. Trees were downed and	
		ed SR 24 east		,8 ~						
Lamar County										
Sulligent	27	1745CST			0	0	5K	0	Thunderstorm Wind (G50)	
Lauderdale County	Trees	were downed	in Sulligent.							
4 NE Killen to	27	1755CST	1.7	150	0	0	145K	0	Tornado (F2)	
5.7 NE Killen	21	1758CST	1.7	130	v	v	14310	v	Tornado (F2)	
									erdale County. A mobile home was and several other structures sustained	
				ong CR 71 in th			uowneu and	uprooted,	and several outer structures sustained	
Lauderdale County		·		•						
5.3 SW Lexington to	27	1759CST			0	0	85K	0	Thunderstorm Wind (G60)	
Anderson		1820CST								

	Time Path Path Local/ Length Width			ber of sons	Estim Dam		February 1999		
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm
ALABAMA, North C	Central								
	Addition straight houses	onal damage of t line wind do in the Anders	wned several on area as we	trees and caus	ed minor routh of Lexi	oof damagengton. Sh	e to several s ingles were o	structures. listurbed o	ngton eastward to Anderson. Strong EMA reported damage to 10 to 12 on a number of houses. Several trees son area.
Fayette County									
16 NE Fayette	27 Severa	1810CST I trees were do	wned near St	uddards Crossro	oads.	0	5K	0	Thunderstorm Wind (G55)
Winston County									
4 NW Double Spgs	eviden	ced in the hou	se as well. A	number of tree	es were dov	vned in the	e area and a i	nobile ho	Thunderstorm Wind (G60) d. Additional structural damage was me was shifted slightly on it's blocks. f Double Springs.
Winston County									
3.5 SSW Double Spgs	27	1825CST 1826CST	0.5	30	0	0	12K	0	Tornado (F0)
		ll on a garage							orings just west of State Road 195. A bd, and a mobile home suffered roof
Greene County									
12 N Eutaw	27 Severa	1825CST I trees and pov	ver lines were	reported down	0 between M	0 antua and	5K South Union	0 in northe	Thunderstorm Wind (G55) ast Greene County.
Walker County									
Gorgas	27 Dime s	1840CST sized hail was	reported in Go	orgas.	0	0	0	0	Hail (0.75)
Hale County			•						
13 N Greensboro	27 Numer	1845CST	reported dow	n in the northw	0 vest part of 1	0 Hale Coun	5K ty near Hava	o na.	Thunderstorm Wind (G55)
Walker County			•		1		•		
Jasper	27 Trees	1855CST were reported	down near Jas	per.	0	0	5K	0	Thunderstorm Wind (G50)
Jefferson County		•		•					
Graysville	27	1900CST			0	5	8K	0	Thunderstorm Wind (G50)
									that fell on a house on 10th Avenue ee came through the roof around 7:00
Tuscaloosa County									
Tuscaloosa	27	1910CST		1 : 4:4 61	0	0	5K	0	Thunderstorm Wind (G55)
Blount County	Severa	i trees were re	portea downe	d in the city of	i uscaioosa.				
2 SW Nector to	27	1915CST	0.4	50	0	1	0 <i>51</i> 7	2W	Townsdo (F2)
1.6 SW Nector	A brie	1917CST f tornado occu ortherly directi	on. Two larg	e metal barns v	vere demoli	shed, a stu	ırdy brick ho	me lost a	Tornado (F2) ado crossed County Road 13 moving portion of its roof, and a small wood
									Several large hay bales were strewn re uprooted or snapped off.
Blount County									
2.5 W Locust Fork to .9 SSE Nector				_	_		0		Thunderstorm Wind (G60) Locust Fork to just south-southeast of rred to four houses, several barns and
				mes were comp				-	
Bibb County									
6.8 SW Brent to 5.9 SW Brent	27	1915CST 1918CST			0	0	45K	0	Thunderstorm Wind (G60)

		Time Local/	Path Length	Path Width		ber of sons	Estima Dama		February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm
ALABAMA, North C									
		, ,		orm downed a maged a			L		n an area about 6 miles southwest of
St. Clair County	Diein.	ri coupie or n	noone nomes	were damaged t	and one nou	se sustanie	od 1001 damag	50 ""	a dec feir on it.
Branchville	27	1926CST			0	0	5K	0	Thunderstorm Wind (G55)
St. Claim Commtra	Severa	l trees and pov	ver lines were	blown down.					
St. Clair County 3 N Whitney	27	1929CST			0	0	5K	0	Thunderstorm Wind (G55)
3 N Winthey	Wind o		eported on Cha	andler Mountain	-				nome, a storage building, and fencing
Chilton County									
Thorsby	27 One ba	1938CST arn had its roof	blown off in	Thorsby.	0	0	5K	0	Thunderstorm Wind (G55)
St. Clair County									
6 ESE Ashville to 9 E Ashville	27	1938CST 1943CST			0	0	240K	0	Thunderstorm Wind (G60)
	width Oldhar founda	was 1/4 mile. 7 m Chapel Chu	The damage parch fellowship mobile homes	aralleled CR 24 hall was destro	starting nea	ar Lickskil ouse had i	let Road and ts roof blown	ended in off and	was 3 miles and the average damage the Lakeview Canyon Road area. The an adjacent garage was pushed off its ere either uprooted or snapped off and
Etowah County									
Gallant to Hokes Bluff	27	1938CST 2009CST			0	1	800K	0	Thunderstorm Wind (G60)
	trees b reporte man ir woman	clocked roadwa ed to another 2 n North Gadso n died, apparer	ays. 10 single 9 homes. Two len was injure ntly of natural	family homes o mobile homes ed when his ho	were totally were demo me crumble ccurred in t	y destroye dished and ed. He ha he middle	d. 20 homes four addition d several bru of the storm.	sustained nal mobile sises and Stowers	y sporadically along this path. Many major damage. Minor damage was a homes received minor damage. One a concussion. In Walnut Park, one Manufacturing Plant in Gadsden had nut Park.
Etowah County									
5.3 SW Southside to 4.5 SSW Southside	27	1951CST 1953CST	1.3	50	0	0	25K	0	Tornado (F0)
	house a	and knocked a	few trees dov e roof was to	vn on Babe Jacl rn off one mob	kson Road t	hen crosse	d H. Neely H	Ienry Lak	ado caused some minor damage to a te on the Coosa River. On the eastern everal other homes and outbuildings.
Etowah County									
Southside	27 The ro	1956CST of of one home	e was blown o	off. Additionally	0 , several tre	0 es were kr	15K nocked down	0 on Pilgrii	Thunderstorm Wind (G55) ms Rest Road off CR 45.
Shelby County									
Vincent	27 Dime s	1942CST sized hail was	reported near	Vincent in north	0 heastern Sho	0 elby Count	0 ty.	0	Hail (0.75)
Marshall County									
Boaz	27	1945CST			0	0	0	0	Hail (0.88)
Marshall County		40.4E.GGT							T 1 (0.70)
Boaz	27 Nickel	1945CST sized hail was	reported alon	g with a few tre	0 e limbs dov	0 vn near Bo	oaz.	0	Thunderstorm Wind (G50)
Calhoun County			•						
Ohatchee to Alexandria	27	1950CST 2001CST			0	0	18K	0	Thunderstorm Wind (G55)
	Severa Alexar	l trees were d	lown from Ol	natchee to Alex	andria in e	eastern Cal	lhoun County	One n	nobile home had its roof torn off in
Shelby County									
Countywide	27	1955CST 2010CST			0	0	0	0	Hail (0.75)
	Dime s	sized hail throu	ighout Shelby	County.					

		Time	Path	Path		iber of	Estim		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per Killed	sons Injured	Dam Property	age Crops	Character of Storm
ALABAMA, North	Centra	ì				J	1 3	•	
Etowah County		<u></u>							
Gadsden	27	2006CST			0	0	0	0	Thunderstorm Wind (G62)
.	Wind	gusts recorded	d at the Gadsd	en EMA office	reached 72	miles an ho	our.		
Dekalb County	25	2005.005					4 ===		T 1 (0.55)
5 SE Crossville	27 One t	2007CST railer was dam	aged and tree	s were reported	0 down near l	0 Hendrixvill	15K le, between 0	0 CR 51 and	Thunderstorm Wind (G55) SR 227.
Coosa County			C	1					
Countywide	27	2010CST 2030CST			0	0	8K	0	Thunderstorm Wind (G55)
Cherokee County	Sever	al trees were d	owned throug	hout the entire	county.				
7.5 SSW Centre	27	2019CST			0	0	20K	0	Thunderstorm Wind (G55)
7.3 SSW Centre	Nume home	erous trees repo s were totally	orted down are destroyed and		Chapel Chunes sustained	rch near Cl l minor dan	R 19. In the	Mt. Weisn	er Community on CR 39, two mobile is and outbuildings were demolished,
Cherokee County									
2 N Forney		2038CST erous trees and nobile homes le			0 n the McCor	0 rd Crossroa	5K ids area. Sev	0 eral outbu	Thunderstorm Wind (G55) addings sustained minor damage and a
Dekalb County				•					
Geraldine	27 One t	2025CST railer was dam		s were downed	0 on CR 39.	0	15K	0	Thunderstorm Wind (G60)
Elmore County									
Millbrook	27 A few	2028CST v trees were do	wned includir	ng one that fell	0 on the police	0 chief's tru	15K ck.	0	Thunderstorm Wind (G55)
Cleburne County					•				
Hopewell	27 The C	2034CST Old Hopewell C	Church had its	steeple blown	0 off and had i	0 minor roof	5K damage. A	0 few trees	Thunderstorm Wind (G55) were also reported down in the area.
Clay County									
Millerville	27 Trees	2035CST and power line		the intersection	of SR 9 and	0 I SR 48 nea	5K ar Millerville	0 e.	Thunderstorm Wind (G55)
Tallapoosa County									
Newsite	27 One r	2100CST nobile home w	as destroyed a	and trees were	0 downed in th	0 e city of N	ew Site.	0	Thunderstorm Wind (G55)
Tallapoosa County									
Dadeville	27 Wind	2107CST gusts estimate	d at 60 miles	an hour were re	0 eported in Da	0 adeville.	0	0	Thunderstorm Wind (G52)
Chambers County									
5 S Lafayette	27 Trees	2140CST were downed		in Chambers C	OCounty.	0	5K	0	Thunderstorm Wind (G50)
Lee County									
4 SE Opelika	27 Dime	2145CST sized hail was		Opelika.	0	0	0	0	Hail (0.75)
ALABAMA, Southe	<u>ast</u>								
	NON	E REPORTED).						
ALABAMA, Southw Baldwin County	<u>vest</u>								
Summerdale to 2 E Summerdale	23	1745CST 1752CST	2	30	0	0	10K		Tornado (F0)

		Time Local/	Path Length	Path Width		Number of Persons		ated age	February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm

ALABAMA, Southwest

An F0 tornado briefly touched down around Alabama 59 near Summerdale in a trailer park. Several trailers had minor damage to skirting and one was shifted off its blocks. One tree had a branch blown off and an abandoned trailer on blocks was turned over. The tornado then moved east and skipped along the ground briefly touching down along County Road 38 where small trees and a fence were blown down. A Weather Service employee followed the storm east and said the funnel was rotating but it never appeared to touch down. The tornado then went back into the cloud before reaching Seminole.

Choctaw County

Melvin 27 1920CST 5K Thunderstorm Wind (G50) 1922CST

Trees were blown down in the Melvin community.

Covington County

0 5K Thunderstorm Wind (G50) Andalusia 2250CST 27

2251CST

High winds blew down a few trees in the south part of Andalusia. A barn and a vehicle were also damaged along Highway 55 in the south part of the city. Wind speeds in the area were measured at 52 mph.

ALASKA, Northern

AKZ002>003-007-010

North Slopes Of Brooks Range - Lower Kobuk Valley-Northern Seward Peninsula - Tanana Valley - Yukon Delta

01 0000AST Extreme Windchill

1500AST

Continuation of event from January.

Zone 2: Anaktuvuk Pass -96

Zone 3: Point Hope -96, Kivalina -94, Shishmaref -92, Deering -95, Buckland -89

Zone 7: Trimms D.O.T. Camp -95 (based on estimated sustained wind speed), Northway -74

Zone 10: Cape Romanzof -87; Hooper Bay-75

AKZ004>005-007>008

Koyukuk-Upper Kobuk Valleys - Upper Yukon Valley - Tanana Valley - Lower Yukon Valley

01 0000AST **Extreme Cold**

12 1200AST

Continuation of event from January...

While northern Alaska was under a relatively cold airmass already, a large pool of colder air moved from the Russian high Arctic Ocean to the Chukchi Sea coast west of Barrow on Jan. 29th and proceeded southeast to the interior of Alaska through the 31st, where it remained until being slowly warmed February 10-12th. Many locations over Zones 4 and 8 (Western Interior) and western zones 5 and 7 (Central Interior) remained in the 50s below during the period and reached the 60s below one or more times.

Zone 4: Bettles -64 8th & 9th; Wiseman -65 9th; Coldfoot DOT-60 5th; Unofficial: Jim River DOT -62 10th.

Zone 5: Beaver: -63 5th; Tanana -60 4th, 8th; Fort Yukon -60 5th; Circle Hot Springs: -62 5th, 6th; Stevens Village -58 4th, 5th;

Zone 7: Nenana -60 5th; Fairbanks -55 Feb 4th; University of AK Co-op: -54 5th; Eielson AFB: -53 4th, 5th;

North Pole: -59 5th; Two Rivers: -59 5th; Gilmore Creek -53 4th; Moose Creek -57 4th; Healy: -51 4th;

Delta Junction 20 Se: -63 4th; Delta Dairyaire: -65 3rd; Montana Creek DOT: -65 4th; Tanacross: -55 5th;

Anderson: -56 4th, 5th; McKinley Park: -54 5th.

Zone 8: Galena: -64 2nd; Kaltag -65 7th; Ruby: -58 6th; Grayling: -58 1st, 2nd, 4th.

AKZ002>004-007

North Slopes Of Brooks Range - Lower Kobuk Valley-Northern Seward Peninsula - Koyukuk-Upper Kobuk Valleys - Tanana Valley

02 1800AST **Extreme Windchill**

2000AST

Under a very Cold airmass covering Northern Alaska, a strong high pressure center stationary over Russia Far east produced winds of 15 to 30 mph over the Northern Seward Peninsula and Lower Kobuk Valley...and winds of 20 mph through Alaska Range Passes (Zone 7) and Brooks Range Passes (Zones 2 and 5). Lowest wind chill values reported (sustained winds) were:

Zones 2 and 5: Anaktuvuk Pass -90; Chandalar DOT -80, Sag River DOT -80.

Zone 3: Point Hope -75; Kivalina -83; Shishmaref -80; Buckland -78; Kotzebue -93; Selawik -80

Zone 7: Nabesna -81; Denali Park -87

AKZ001>003-006>007-010

Arctic Slope Coastal - North Slopes Of Brooks Range - Lower Kobuk Valley-Northern Seward Peninsula -Southern Seward Peninsula-Eastern Norton Sound - Tanana Valley - Yukon Delta

Extreme Windchill

A weak high pressure center in an existing very cold airmass covering Northern Alaska, strengthened on the 9th and produced winds of 15 to 30 mph over the northern Alaska resulting in dangerous Wind Chills. Lowest reported wind chills (sustained wind

Zone 1: Kuparuk -89; Deadhorse -91; Prudhoe Bay -92.

Zone 2: Anaktuvuk Pass -89.

		Time	Path	Path	Num	ber of	Estimated		February 1999
		Local/	Length	Width	Per	sons	Dam	age	,
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm

ALASKA, Northern

Zone 3: Point Hope -93; Kotzebue -97; Selawik -103.

Zone 6: Unalakleet -84. Zone 7: Denali Park -70. Zone 10: Saint Marys -79

AKZ003-006-009

Lower Kobuk Valley-Northern Seward Peninsula - Southern Seward Peninsula-Eastern Norton Sound - St. Lawrence Island-Bering Strait Coast

A low pressure center and its associated frontal system moved northeast across the Bering Sea and dissipated in the Chukchi Sea early the morning of the 12th. Blizzard conditions occurred at:

Zone 3: Kotzebue, Point Hope, Kivalina, Selawik.

Zone 6: Golovin, Nome (close). Zone 9: Gambell, Savoonga.

AKZ009>010

AKZ009

St. Lawrence Island-Bering Strait Coast - Yukon Delta

13 0200AST 0 0 Blizzard

14 1800AST

St. Lawrence Island-Bering Strait Coast

13 1400AST 0 0 High Wind (G54)

14 0900AST

A very strong low pressure center of 944 mbs moved slowly from south of the Aleutian chain to west of the Pribilofs late on the 14th and then slowly weakened. In addition, wind gusts of 60 to 62 mph occurred at times at Gambell. Blizzard conditions occurred at:

Zone 9: Gambell; Tin City.

Zone 10: Hooper Bay; Cape Romanzof

AKZ009 St. Lawrence Island-Bering Strait Coast

17 1000AST 0 0 Blizzard 1400AST

A small weather system moved into the northern Bering Sea. Blizzard conditions occurred on Saint Lawrence Island, only at Gambell.

ALASKA, Southeast

NOT RECEIVED.

ALASKA, Southern

AKZ012>013 Kuskokwim Valley - Susitna Valley

01 0000AST 0 0 Extreme Windchill

08 2359AST

AKZ015>019 Cook Inlet - Bristol Bay Coastal - Central Gulf Coast - Kodiak Island-Eastern Alaska Peninsula - Western

Alaska Peninsula

01 0000AST 1 1 250K Extreme Cold

13 2359AST

M42BO

AKZ017>018 Central Gulf Coast - Kodiak Island-Eastern Alaska Peninsula

01 0000AST 0 0 High Wind (G80)

12 2359AST

Wind chills as low as 107 degrees below zero continued at Cantwell, in the northern Susitna Valley, briefly improving from the 2nd to the 4th as the cold snap went into its second week. Around Anchorage, temperatures remained below 20 degrees from the 25th of January until the 13th of February. Temperatures on the east side of Anchorage in low lying, un-populated areas reached 43 below zero...while International Airport readings as cold as 28 below were reported.

The extreme cold also impacted Cook Inlet by causing increased/new ice growth. During the cold snap, movement of this ice caused damage to a urea barge and the pier it was moored at. A deck barge was ripped from its anchorage by the heavy ice flow. The Coast Guard cutter "Roanoke Island" reported that they were pinned to their moorings in 3-6 inches of ice, unable to depart without the assistance of an icebreaking tug (the low in Homer was -10 degrees F).

From February 1 - 12, strong northwest winds were reported across Kodiak Island. Gusts reached 92 mph at a remote site on Kodiak Island (Booth Lake). On the 7th, Sunday, wind gusts reached 59 mph at the Kodiak airport on the Coast Guard Base between 6 and 8am. Additionally during this cold spell, frozen pipes were reported in Ouzinkie and Larsen Bay, small villages on the Island. A frozen water main was also reported in Old Harbor, affecting the school and office buildings. Frozen pipes were also reported at the U.S. Fish and Wildlife housing units in Kodiak.

		Time	Path	Path	Num	ber of	Estimated		February 1	999
		Local/	Length	Width	Per	rsons	Dam	age	3	
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

ALASKA, Southern

Problems with the cold were reported even across parts of the Alaska Peninsula and adjacent offshore islands. Sand Point reported problems with their water system, as residents let their taps run to prevent freezing. The unseasonable cold caused several problems across Southcentral Alaska as the cold air reached well south of the western and central Gulf of Alaska. Frozen pipes were reported in at least one Kodiak island village. heavy ice caused damage to at least one urea vessel in Cook Inlet and to the Nikiski dock. Fuel problems were reported in Seldovia.

There were also scattered reports of fuel gelling problems (number 2 diesel) due to the frigid air. As a matter of fact, this gelling of number 2 diesel fuel is a significant problem at many Gulf of Alaska Coastal communities and Alaska Peninsula villages when unusually cold air penetrates these areas..not only for home/business heating, but for electric generating systems that many of these communities rely on. Both Port Alsworth and Ouzinkie needed special fuel deliveries.

Also from February 1 - 12, winds ranging from 50 to locally 69 mph were reported around Prince William Sound and the Central North Gulf Coast. Reporting sites with strong winds included Seward, Valdez and at several remote sites in the Sound. The highest winds (81 mph) were reported at the NWS official observation site at the Whittier Boat Harbor from midnight to 9am on the 7th. Locally stronger winds (90+ mph), however, were reported by residents around Whittier. The winds caused damage to several boats, including a lost bimini, radar torn loose from fittings, canvasses torn off of boats, inflatables removed by the wind, sail damage due to unfurling and winds ripping and fraying material and fender damage. The cold (down to -20 F) caused major freezeups at Whittier Manor. Frozen pipes were also reported at the Begich Tower complex where incoming pipes froze even below the 8 foot depth.

February 3rd saw yet another fatality in the coastal waters of Resurrection Bay. The F/V Northern Aurora capsized in rough seas and heavy freezing spray. Two fishermen on board. One survived and was rescued by the USCG. The other died. On scene reports by the USCG. "north winds 45 to 50 kts and seas to 8 feet with heavy fog and wind chills to 65 below".

From 4am AST Friday, February 5th through Saturday, February 6th, wind chills calculated down as low as 107 below zero at Sparrevohn airport.

The strong outflow winds through the Alaska range and Chugach and Wrangell Mountains continued through Saturday, February 13th. Several areas adjacent to Prince William Sound and the Kenai Peninsula were affected. High wind warnings and extreme wind chill warnings were issued for much of Southcentral Alaska during the first week of February.

Temperatures finally began to return to normal during the weekend of 2/12 - 2/14. Several low temperature records were either tied or broken across Southcentral Alaska.

Aleutian Islands

Dutch Harbor to Countywide 3 0000AST 2359AST 0 750K

Seiche

The fishing vessel "Destination", a 280 foot factory trawler reported damage from a rogue wave while transiting from Dutch Harbor to the fishing grounds in the Bering Sea. \$750,000.00 damage was done to electronic gear when the rogue wave blew out the pilot house windows, damaging all electronic gear on the bridge, including the gyro compass and the radar. The vessel returned safely to Dutch Harbor for repairs.

AKZ019 Western Alaska Peninsula

06 0400AST 07 1500AST

0 0

0

Blizzard

Blizzard conditions were reported at several locations along the Alaska Peninsula...as cold arctic air persisted and winds picked up.

AKZ020 Aleutian Islands

10 0000AST 1800AST High Wind (G55)

A vigorous low moved northward into the extreme southwest Bering Sea. Wind gusts reached 63 mph at Shemya Wednesday on the south and southwest side of the low.

AKZ016>019-021 Bristol Bay Coastal - Central Gulf Coast - Kodiak Island-Eastern Alaska Peninsula - Western Alaska Peninsula - Pribilof Islands

0

13 0600AST 0 0 High Wind (G69)

15 1500AST

Strong east to southeast winds preceded a vigorous front associated with a deep Aleutian low. The low curved east northeast from the Central Aleutians to between Adak and Saint Paul Island Saturday. The front elongated east and northeast...extending from the Pribilofs through Unimak Pass Saturday afternoon. Adjusted southeast wind gusts from the Cold Bay ASOS reached 70 mph. At

		Time	Path	Path	Num	ber of	Estimated		February 1999
		Local/	Length	Width	Per	sons	Dam	age	•
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm

ALASKA, Southern

Saint Paul, adjusted ASOS winds reached 64 mph.

Adjusted wind gusts reached 52 mph ahead of the front late Saturday and 48 mph early Sunday at King Salmon.

At the Kodiak airport, adjusted east southeast winds peaked at 58 mph just ahead of the front.

Along the Kuskokwim Delta, ASOS adjusted wind gusts also reached 52 mph Sunday morning.

Along the Central North Gulf Coast, east southeast wind gusts peaked very close to 80 mph at Middleton Island.

AKZ015-017>019

Cook Inlet - Central Gulf Coast - Kodiak Island-Eastern Alaska Peninsula - Western Alaska Peninsula

13 0800AST 0 0 High Wind (G81)

15 2300AST

Portage ASOS adjusted east wind gusts reached 93 mph between 9:15am and 9:45am Sunday.

A moderate front, preceded by brisk easterly winds, continued to elongate eastward across the Alaska Peninsula and into the Gulf of Alaska.

AKZ015>016

Cook Inlet - Bristol Bay Coastal

14 0000AST 0 0 20K Heavy Snow 15 2359AST

Heavy snow around Kachemak Bay and several areas around Iliamna lake area caused numerous power outages and felled power poles. The heavy snow was caused by overrunning across the arctic front...piling anywhere from 1 - 3 feet of very wet snow around communities adjacent to Kachemak Bay. Parts of Homer, Tutka Bay and Halibut Cove were without power for periods. Electricity was also reported off at times from Homer to Anchor Point.

Scott Ulmer, owner of Ulmer's Drug and Hardware said "the snowstorm was the worst he could remember in his 20 years. Ulmer reported "This caused more damage on the ridge and hillside than I can remember every seeing here. There are alders flat on the ground and birch trees split right down the middle. There are also a number of power lines down." Homer Electric reported power outages for close to 400 customers. Several dozen households were without power for much of Sunday night, both from downed lines and from shorting out caused by lines swinging together. Roads were impassable in some areas where lines were down. Five poles were reported down in the Baycrest Hill area and three poles down in the Ohlson Mountain area. From Sunday night through Monday morning, 3 departures from Anchorage to the Homer airport had to be cancelled due to windy and icy conditions at the Homer airport Sunday night and due to low visibilities early Monday at the height of the snowstorm.

Bill "Pinky" Morse, who lives in Fritz Creek just east of the population center in Homer, reported water on roads up to a foot and a half deep due to frozen culverts.

A brief power also occurred around Kenai-Soldotna affecting about 2,000 customers Monday morning due to a transmission problem, possibly snow related, between Anchorage and the Kenai Peninsula.

In Iliamna, affected by the same snowstorm, 8 poles were snapped and lines were damaged, also causing power outages. Power and phone service was also out at Newhalen, a small community at the mouth of the New Halen River which feeds Iliamna Lake. Replacing the poles was complicated because the ground in the area was frozen about 5 feet down. Some homes used back-up generators, while others used camp stoves and candles to try to keep their pipes from freezing.

The heavy snow ended across the Kachemak Bay area mid Monday.

AKZ016

Bristol Bay Coastal

15 0000AST 0 0 Extreme Windchill 2359AST

Wind chills reached 80 below zero at both Cape Newenham and King Salmon.

AKZ017

Central Gulf Coast

18 0000AST 0 0 High Wind (G50)

1200AST

Brisk southwest winds followed a vigorous, but weakening low as it moved northwestward into Prince William Sound early Thursday. Adjusted wind gusts at Middleton Island reached 58 mph on the back side of the low.

AKZ011-015>016-018>020

Kuskokwim Delta - Cook Inlet - Bristol Bay Coastal - Kodiak Island-Eastern Alaska Peninsula - Western Alaska Peninsula - Aleutian Islands

19 0600AST 0 0 High Wind (G100)

21 0900AST

	Time		Path	Path	Num	Number of		ated	February 19	
		Local/ Len	Length	Width	Persons		Damage			
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

ALASKA, Southern

AKZ015

Cook Inlet

20 0500AST 0 0 Heavy Snow 21 1200AST

An intense 962 mb low moved into the central Aleutians Friday, decelerating and curving north to 120 miles southwest of the Pribilofs early Saturday as a 955 mb center. The low then began to slowly drift north to a position 150 miles northwest of Saint Paul Island early Sunday. The front associated with this intense storm moved through Dutch Harbor/Unalaska at around 9 pm Friday then through Bristol Bay to just north of Nunivak Island back into the central Bering Sea around the low.

Strong southeast winds preceded the front, gusting to 115 mph in Iliuliuk Bay near Dutch Harbor. The gusts were measured by the Coast Guard Cutter "Mellon" and also at the APL dock on the Bay's southwest coast. The "Heikfu" was awaiting a load of frozen fish, when gusts began to rapidly increase Friday afternoon. The vessel began to drag anchor and went aground near Rocky Point. The Dutch Harbor harbormaster relayed that 'it was a good thing that there were only wind waves involved, instead of swells which could have more permanently grounded the vessel'. Fortunately, no lives were lost and no fuel was spilled...however it was several days later before the vessel was re-floated and moved to a repair dock.

On the south side of the low, adjusted wind gusts reached 56 mph at Dutch Harbor and 65 mph at Adak. Winds were accompanied by driving snows, creating brief blizzard conditions. Communications to and from Dutch Harbor/Unalaska were cut off for about 6 hours as heavy snow piled up on the 'earth station relay' which feeds and downloads transmissions from a satellite.

Prefrontal winds were also very strong along the Alaska Peninsula. Adjusted winds at Cold Bay reached 75 mph just prior to the frontal passage. Sustained southwest winds of 58 mph on the back side of the low were reported by several ships just northwest of the Peninsula

Midday Saturday, prefrontal, southeast, adjusted wind gusts reached as high as 73 mph at Cape Newenham, right at the border of the Bristol Bay and Kuskokwim Delta zones. Winds are typically accelerated by terrain in this area, however adjusted winds at King Salmon reached 46 mph, with 60 mph adjusted gusts recorded at Iliamna. Just offshore of the Kuskokwim Delta, adjusted prefrontal wind gusts at Mekoryuk reached 58 mph. Early Saturday evening, gusts reached 76 mph at Cape Romanzof, another area where winds are accelerated by terrain.

On Kodiak Island, adjusted prefrontal wind gusts were clocked at 61 mph at the airport. Booth Lake RAWS recorded gusts of 55 mph.

Across the Kenai Peninsula, locally strong winds were also reported. Gusts reached close to 40 mph around Homer...along with 8 inches of snow in town and 18 inches of new snow along the Ridge. Heavy snow began Saturday and ended Sunday around Kachemak Bay.

Further north, wind gusts reached 64 mph at the Portage Visitors Center several times Saturday. Saturday evening, wind gusts of 55 mph were recorded at Glen Alps (Upper Anchorage hillside).

AKZ017	Centra	al Gulf Coast		
C1 4-	26	0000 4 CT	0	

Cordova to 26 0000AST 0 0 5K Heavy Snow Countywide 2130AST

A small, but wet low at the southern entrance to Prince William Sound caused significant overrunning of the arctic front and was responsible for snows ranging form 1 to locally 3 feet across land areas adjacent to Prince William Sound Friday. Heaviest snows were reported in the city of Cordova...where nearly 3 feet of snow kept road crews busy well into Saturday.

AKZ015 Cook Inlet

26 1200AST 0 0 High Wind (G53) 1500AST

Adjusted east winds at Portage gusted to 60 mph Friday. These winds resulted from an exiting low in northwest Prince William Sound.

AKZ011-016 Kuskokwim Delta - Bristol Bay Coastal

26 0000AST 0 0 Extreme Windchill 28 0700AST

AKZ019 Western Alaska Peninsula

27 0300AST 0 0 High Wind (G58) 28 0700AST

		Time	Path	Path	Num	Number of		ated		February 1999
		Local/	Length	Width	Per	sons	Dam	age		•
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

ALASKA, Southern

Northwest winds increased Saturday across the Alaska Peninsula as pressures began to fall in the northern Gulf of Alaska and moderate high pressure ridging spread into the Bering Sea. Wind gusts reached 67 mph at Chignik, on the southeast side of the Alaska Peninsula, as cold air funnelled into the North Pacific from the mainland and Bristol Bay. The strong winds were also accompanied by blowing snow and snow squalls.

Wind chills as low as 55 below were calculated across the Bristol Bay area and Kuskokwim Delta as cold arctic air combined with winds in the 10 to 25 mph range.

AKZ020 Aleutian Islands

28 0000AST 0 0 High Wind (G78) 2359AST

A strong weather front approached the Kamchatka Peninsula and extreme western Aleutians from the southwest Sunday. The front was preceded by strong southeast winds...locally gusting to 90 mph along the western Aleutians.

AKZ017 Central Gulf Coast

28 1200AST 0 0 High Wind (G55) 2359AST

Strong north winds were reported around Seward...with adjusted ASOS gusts reaching 63 mph late Sunday as a moderate low moved from near Middleton Island to just south of the Kenai Fiords.

AKZ017 Central Gulf Coast

28 1500AST 0 0 Blizzard 2359AST

Strong southwest winds originating up on the Whittier Glacier, just southwest of town, gusted to 45 mph.

The strong winds combined with overrunning snow northwest of the arctic front, to produce several hours of blizzard conditions in snow and blowing snow. Visibilities were frequently below 1/4 mile from 8 pm Sunday to 12 am Monday.

AMERICAN SAMOA

Countywide

Manu A County					
Countywide	05	1030SST 1700SST	0	0	Heavy Rain
Rose County					
Countywide to Central Portion Swains County	05	1030SST 1700SST	0	0	Heavy Rain
Countywide	05	1030SST 1700SST	0	0	Heavy Rain
Tutuila County					
Countywide	05	1030SST 1700SST	0	0	Heavy Rain

Heavy rain was caused by a trough of low pressure over Samoa. The total rainfall recorded for this event by WSO-Pago Pago was 1.85 inches.

Manu'A County					
Countywide	16	0000SST 1500SST	0	0	Heavy Rain
Rose County					
Countywide	16	0000SST 1500SST	0	0	Heavy Rain
Swains County					
Countywide	16	0000SST 1500SST	0	0	Heavy Rain
Tutuila County					

Heavy showers were caused by a disturbance to the southwest of the Samoan Islands. A line of thunderstorms was moving toward Samoa from the southwest. The total rainfall received at WSO-Pago Pago for this event was 2.64 inches.

Heavy Rain

ASZ001>004 Swains - Tutuila - Manu'A - Rose

16

0000SST

1500SST

16 1300SST 0 0 High Wind (G40)

Gusty winds that were generated by an active trough of low pressure about 300 miles south of American Samoa caused several days of high winds. Peak winds of 46 mph were recorded on the 19th.

Storm	Data and	Unusual	Weather	Phenomena
	Data anu	Unusuai	v v caunci	1 IICHUIICHA

		Time Local/	Path Length	Path Width		ber of	Estimated Damage	February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property Crops	Character of Storm
AMERICAN SAMO	<u>A</u>							
Manu'A County								
Countywide	26	1330SST 2359SST			0	0		Heavy Rain
Rose County		200,001						
Countywide	26	1330SST 2359SST			0	0		Heavy Rain
Swains County								
Countywide	26	1330SST 2359SST			0	0		Heavy Rain
Tutuila County								
Countywide	26	1330SST 2359SST			0	0		Heavy Rain
	rain fo	r this event was	4.30 inches	s, and this event	had the mo	st measura		e near the Samoan Islands. The total of February. The total precipitation
ARIZONA, Central			C		•			
AZZ014	Little	Colorado Ri	ver Valley	In Apache (County			
	10	0910MST 1300MST			0	0	1K	High Wind (G84)
	observ	therly wind gus red a wind gust	of 61 mph	(53 kts) at 0910	am LST. Th	ne wind gu		t 1045am LST. The St. Johns airport ls and removed the skirting from one
ARIZONA, Northwe		e nome. These w	ina gusts pi	receded a cold i	ioni mai cio	ssed north	erii Arizona iatei uns c	ay.
ADIZONA Condi	NONI	E REPORTED.						
ARIZONA, South AZZ035	Coch	ise County						
ALLU33	12	1120MST			0	0		Dust Storm
	Near 2	1700MST zero visibilities o			Interstate 1	0 in the W		ng winds blowing across the Willcox
ARIZONA, Southwe		The winds wer	e the result	or a dry cold fro	ont moving t	inrougn Ar	izona.	
Yuma County	<u>.5t</u>							
20 N Yuma	05	1507MST 1523MST			0	0		Funnel Cloud
			ud observed	by Yuma Foot	hills spotter.	. Wall clou	d and thunder also rep	orted at this time as cold front moved
ARKANSAS, Centra	al and l	North Centr	<u>al</u>					
Pope County	0.0	*1.00 CCM						
1 SW Pottsville to 5 N Atkins	06	2139CST 2149CST	8	250	0	0		Tornado (F2)
	damag also su much	ed or destroyed stained some da	several mol amage. Mos ed. Some t	oile homes and t of the damage rees were down	caused roof was along o	damage to or near Hig	houses. Several camp hway 247 just south of	As the tornado moved northeast, it ers, boat sheds and storage buildings of Pottsville. Farther northeast, not as h of Atkins on Highway 105. A tree
Searcy County	on							
St Joe	06 Thund	2140CST erstorm winds k	nocked dow	n a few trees at	0 St. Joe.	0		Thunderstorm Wind (G50)
Yell County								
Centerville	06 Thund	2145CST erstorm winds s	napped a tre	e near Centervi	0 lle.	0		Thunderstorm Wind (G50)
Searcy County								
Marshall	06 Thund	2150CST erstorm winds b	lew over a 2	200 pound wate	0 r fountain at	0 Marshall.		Thunderstorm Wind (G50)

		Time	Path	Path	Numb		Estimated	February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Pers Killed	ons Injured	Damage Property Crops	Character of Storm
ARKANSAS, Centra	al and	North Cen	tral					
Searcy County								
Harriet	06 Thund	2200CST erstorm winds	downed trees	near Harriet.	0	0		Thunderstorm Wind (G50)
Conway County								
Jerusalem	06 Thund	2200CST erstorm winds	removed part	of a roof from	0 a home at Je	0 rusalem.		Thunderstorm Wind (G50)
Van Buren County								
7 NE Clinton	06 Thund	2220CST erstorm winds	knocked dow	n a few trees al	0 ong Highway	0 y 16 north	east of Clinton.	Thunderstorm Wind (G50)
Perry County								
Perryville	06 Thund	2220CST erstorm winds	caused some	roof damage at	0 Perryville.	0		Thunderstorm Wind (G50)
Stone County								
Fifty Six	06 Thund	2230CST erstorm winds	blew down so	ome road signs	0 at Fifty Six.	0		Thunderstorm Wind (G50)
Faulkner County								
Vilonia	06 Thund	2240CST erstorm winds	caused some	roof damage at	0 Vilonia.	0		Thunderstorm Wind (G50)
Cleburne County								
5 N Pearson	06 Thund	2240CST erstorm winds	knocked dow	n trees north of	0 Pearson.	0		Thunderstorm Wind (G50)
Garland County								
Hot Spgs	06 Thund	2245CST erstorm winds	knocked dow	n some large tro	0 ee limbs in H	0 Iot Spring	s.	Thunderstorm Wind (G50)
Izard County								
Brockwell	06	2245CST			0	0		Hail (0.75)
Saline County								
Benton	06 Thund	2305CST erstorm winds	caused some	roof damage in	0 Benton.	0		Thunderstorm Wind (G50)
Pulaski County								
Little Rock	06 Thund	2305CST erstorm winds	blew down a	few trees in Lit	0 tle Rock.	0		Thunderstorm Wind (G50)
White County								
1 N Beebe to 1 NE Beebe	06	2305CST 2307CST	1	100	0	0		Tornado (F1)
	truck g	garage was de minor roof da	stroyed and a mage at a mo	truck was overt	urned. Trees with a cou	were also ple of mo	downed in the area.	reet and Highway 367. In that area, a Farther northeast, the tornado caused a their foundations. Not far from the
Lonoke County								
Cabot	06 Thund	2305CST erstorm winds	blew a tree d	own onto a tran	0 sformer in C	0 abot.		Thunderstorm Wind (G50)
Hot Spring County								
Malvern	06 Thund	2325CST erstorm winds	knocked seve	eral trees down i	0 n Malvern.	0		Thunderstorm Wind (G50)
Hot Spring County								
2 S Malvern	06 Thund	2330CST erstorm winds	knocked dow	n several trees s	0 south of Mal	0 vern on or	near Highway 67.	Thunderstorm Wind (G50)
Woodruff County								
5 SE Patterson	06 Thund	2355CST erstorm winds	knocked dow	n a few trees or	0 nto Highway	0 145 south	east of Patterson.	Thunderstorm Wind (G50)
Grant County								
Sheridan	07 Thund	0005CST erstorm winds	caused some	roof damage at	0 Sheridan.	0		Thunderstorm Wind (G50)

		Time	Path	Path	Numb		Estimated	February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Pers Killed	ons Injured	Damage Property Crops	Character of Storm
ARKANSAS, Centra	al and	North Cen	tral					
Dallas County								
8 NE Holly Spgs	07 Thund	0010CST erstorm winds		n a few trees or	0 n or near Hig	0 hway 9 no	ortheast of Holly Spring	Thunderstorm Wind (G50) s.
Ouachita County								
Stephens	07 Thund	0010CST erstorm winds	knocked dow	n several trees	0 at Stephens.	0		Thunderstorm Wind (G50)
Calhoun County								
Countywide	07 Thund	0015CST erstorm winds		ees in various p	0 blaces through	0 hout Calho	oun County.	Thunderstorm Wind (G50)
Jefferson County								
Pine Bluff	07 Thund	0035CST erstorm winds	knocked a tre	e down onto a	0 house at Pine	0 Bluff.		Thunderstorm Wind (G50)
Jefferson County								
Hooker	07 Thund	0045CST erstorm winds		oved a roof from	0 n a mobile h	0 ome at Ho	oker.	Thunderstorm Wind (G50)
Cleveland County								
3 N Calmer	07 Thund	0050CST erstorm winds	knocked dow	n a few trees no	0 orth of Calm	o er.		Thunderstorm Wind (G50)
Drew County								
2 N Wilmar	07 Thund	0130CST erstorm winds	blew down so	ome trees on or	0 near Highwa	0 ny 133 nor	th of Wilmar.	Thunderstorm Wind (G50)
Arkansas County								
5 NW Gillett	09	1955CST			0	0		Hail (0.88)
Jefferson County								
7 SE Reydell	09	2015CST			0	0		Hail (1.00)
Arkansas County								
2 NW Gillett	09	2025CST			0	0		Hail (0.75)
Lincoln County	0.0	***						
5 N Gould	09	2025CST			0	0		Hail (1.00)
Arkansas County 5 S Gillett	09	2125CST			0	0		Hoil (0.99)
Pope County	09	2125051			U	U		Hail (0.88)
5 N Dover	11	1125CST			0	0		Lightning
2 IV BOVEL	Lightn	ing struck a l				bout 5 mi	iles north of Doverca ued a boil order for its c	using a nearby 8-inch water line to
Pike County								
1 E Daisy	11 Thund	1200CST erstorm winds	blew down so	ome large tree l	0 imbs east of	0 Daisy.		Thunderstorm Wind (G50)
Garland County								
3 SW Hot Spgs	11 Thund	1300CST erstorm winds		n large tree lim	0 lbs and powe	0 r lines sou	thwest of Hot Springs.	Thunderstorm Wind (G50)
Hot Spring County								
Malvern	11	1300CST			0	0		Hail (0.88)
Hot Spring County								
Countywide	11 Thund	1300CST erstorm winds		n several trees	0 in various pa	0 rts of Hot	Spring County.	Thunderstorm Wind (G50)
Conway County								
Plumerville	11 Thund	1320CST erstorm winds	blew several	cars off of Inter	0 estate 40 near	0 Plumervi	lle.	Thunderstorm Wind (G50)
Pulaski County								
Little Rock	11 Thund	1325CST erstorm winds		few trees in Lit	0 tle Rock.	0		Thunderstorm Wind (G50)

		Time	Path	Path		ber of	Estin		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per Killed	sons Injured	Dam Property	nage Crops	Character of Storm
ARKANSAS, Centra	al and	North Cent	ral						
Clark County									
9 ENE Alpine	11	1335CST			0	0			Hail (0.75)
Hot Spring County									
2 SW Bismarck	11	1335CST			0	0			Hail (0.75)
Lonoke County									
Keo	11 Thund	1400CST lerstorm winds	knocked dow	n some trees at	0 Keo	0			Thunderstorm Wind (G50)
Lonoke County	1114114	iorotoriii wiiido	inioenied do n	in some arees at	11001				
Humnoke	11 Thund	1427CST lerstorm winds	blew down a	few trees at Hu	0 mnoke.	0			Thunderstorm Wind (G50)
Jefferson County									
Pine Bluff	18	1850CST			0	0			Hail (0.75)
Perry County									
Perryville Faulkner County	27	1410CST			0	0			Hail (0.75)
Conway Lonoke County	27	1439CST			0	0			Hail (0.75)
Cabot Pulaski County	27	1530CST			0	0			Hail (0.75)
4 NW North Little Rock	27	1535CST			0	0			Hail (0.75)
Prairie County									
Des Arc	27	1610CST			0	0			Hail (0.75)
Cleveland County									
8 SE Rison Monroe County	27	1625CST			0	0			Hail (0.88)
1 E Fargo Monroe County	27	1645CST			0	0			Hail (1.00)
1 E Clarendon Pulaski County	27	1700CST			0	0			Hail (0.75)
1 S Gravel Ridge ARKANSAS, East Cross County	27	1714CST			0	0			Hail (0.75)
Hickory Ridge to	07	0010CST			1	0	75K		Thunderstorm Wind
Wynne									wining was blown off of a building in ed down. M36MH
Poinsett County			cusinosse	dumingo	50 . Oran ti	- 25 and por	51 Poles We	moone	
Harrisburg	07	0015CST 0020CST			0	0	5K		Thunderstorm Wind
	A few	trees were kno	cked down.						
St. Francis County									
Colt	07	0020CST 0025CST	1.		0	0	5K		Thunderstorm Wind
Crittenden County	Sever	al trees and pov	ver iines wer	e diown down.					
Earle to	07	0040CST			0	1	15K		Thunderstorm Wind
West Memphis		0055CST	ver poles wer	re knocked dow				house inju	ring one person and trapping a second
	person	n in bed.							
Mississippi County	. –								
Leachville to Wilson	07	0050CST 0105CST			0	0	20K		Thunderstorm Wind

	Sto	orm Da	ata and	Unusu	ial W	eathe	r Phe	nom	ena	
		Time Local/	Path Length	Path Width		ber of	Estim Dam			February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storn	1
ARKANSAS, East Clay County	Some	trees and pow	er poles were b	olown down. So	ome of the t	rees fell on	at least one	house in	West Ridge.	,
Coming	11	1605CCT			0	0	2517		Thumdonstown	. Wind

Thunderstorm Wind Corning 1605CST 25K 1610CST At least one home and several businesses lost part of their roofs. Several sheds were damaged. Several trees and power lines were blown down. **Phillips County** 1500CST Helena 27 0 0 15K Thunderstorm Wind 1505CST

A couple of buildings in downtown Helena were damaged. Several trees and power lines were also knocked down.

Poinsett County

Weiner 27 1625CST 0 0 5K Thunderstorm Wind
1630CST

A few trees were blown down.

ARKANSAS, Northwest

 Crawford County

 Van Buren
 06
 1950CST
 0
 0
 Thunderstorm Wind (G52)

 Benton County

 3 E Highfill
 06
 2000CST
 0
 Flash Flood

Water covered AR Hwy 264 near Highfill, blocking access to the new Northwest Arkansas Regional Airport. The NWS Cooperative Observer 2 miles south of Bentonville reported 2.22 inches of rain for the 24-hour period ending at 7 AM February 7. A clogged drain may have led to this flooding report.

Sebastian County

1 N Midland 06 2001CST 0 0 17K Thunderstorm Wind
Thunderstorm winds blew the roof off of a shop, tore off a chimney, destroyed a porch, destroyed a barn, destroyed an outhouse,

and uprooted numerous trees in a localized area about one mile north of Midland.

Winds of 70 mph caused some roof damage in Greenwood.

Sebastian County

4 E Hackett to 06 2004CST 0 0 Thunderstorm Wind (G56) Excelsior 2005CST

At 804 PM, there was a HAM radio operator reported 60 mph winds 4 miles east of Hackett. At 805 PM, another HAM radio operator reported 65 mph winds in Excelsior.

Sebastian County

2 E Huntington 06 2007CST 0 0 Thunderstorm Wind (G61) Sebastian County Greenwood 06 2010CST 0 0 2K Thunderstorm Wind (G61)

Franklin County

3 NW Ozark 06 2030CST 0 0 0.10K Thunderstorm Wind

A large tree was blown onto AR Hwy 23 north of Ozark, blocking traffic for part of the night.

A line of thunderstorms moved across west central Arkansas in advance of an upper level disturbance on the evening of February 6. These storms produced many reports of 60-70 mph winds and some localized wind damage.

Further north in Benton County, a stationary front caused a persistent line of non-severe thunderstorms for much of the afternoon. Finally by early evening, one last strong thunderstorm moved along the front. The heavy rainfall with this last thunderstorm caused localized flooding in Benton County.

ARZ029 Sebastian

The high temperature of 77 degrees Fahrenheit at the Fort Smith Regional Airport broke the record high temperature for this date.

ARZ029 Sebastian

10 0000CST 0 0 Record Warmth 2359CST

The high temperature of 80 degrees Fahrenheit at the Fort Smith Regional Airport broke the record high temperature for this date.

Crawford County

Van Buren 11 1030CST 0 0 0.10K Thunderstorm Wind

A large tree was blown down.

	Su		ata am	i Onusu	iai vv	eame	rrne	110111	ena
		Time Local/	Path Length	Path Width		ber of	Estim Dam		February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm
ARKANSAS, North	west								
Benton County									
Avoca	11 Sever	1035CST al large tree lir		vn down.	0	0	0.10K		Thunderstorm Wind
Sebastian County									
Ft Smith	11 A larg	1040CST ge restaurant si		over at 58th St	0 reet and Rog	0 gers Avenu	1K e		Thunderstorm Wind
Carroll County									
Berryville Madison County	11	1100CST			0	0			Thunderstorm Wind (G52)
Huntsville	11 Sever	1115CST al large tree lir		vn down.	0	0	0.10K		Thunderstorm Wind
	A bro	ken line of se d in unusually	vere thunders warm, humid	torms developed air preceding	a strong col				norning of February 11. The storm approached. The primary threa
		hese storms w	as in the form	of damaging w	inds.				
ARKANSAS, South	<u>east</u>								
	NON	E DEDODÆED							
ADIZANCAC Couth		E REPORTED).						
ARKANSAS, South	west								
Howard County	0.6	222E/CCT							TI 1 (C.52)
4 W Nashville	06 Sever	2237CST al large southe		1.	0	0			Thunderstorm Wind (G52)
Miller County									
4 SE Texarkana	06 Trees	2320CST toppled along			0	0			Thunderstorm Wind (G52)
Hempstead County									
6 SW Hope Hempstead County	06	2320CST			0	0			Hail (1.00)
10 SW Hope	06	2325CST			0	0			Thunderstorm Wind (G52)
T 0 C	Sever	al large trees to	oppled onto H	wy 29.					
Lafayette County									
Lewisville	06 Nume	2345CST erous trees down		29 and CR 31.	0	0			Thunderstorm Wind (G52)
Nevada County									
8 S Prescott	06 Nume	2350CST erous trees dow		371.	0	0			Thunderstorm Wind (G52)
Sevier County									
5 SW De Queen	11 Trees	1115CST down.			0	0			Thunderstorm Wind (G52)
TT 10 4									

Trees	down along I-30.		
11	1250CST	0	0
Nume	rous trees down along CR 293		

1130CST

1200CST

1210CST

Trees down along Hwy 71.

11

Howard County Nashville

Howard County

Nashville

Miller County 5 N Fouke

Hempstead County 7 W Hope

Nevada County 15 S Prescott

30K

0.50K

0

0

0

Thunderstorm Wind (G52)

Thunderstorm Wind (G61)

Thunderstorm Wind (G52)

Thunderstorm Wind (G62)

Shingles blown off a local radio station and wind damage to three homes on the north side of town.

Trees down on Highway between Nashville and Mineral Springs. Tin roof off shed in Nashville.

Storm Data and Unusual Weather Phenomena Time Path Path Number of Estimated February 1999 Local/ Length Width Persons Damage Character of Storm Standard (Miles) (Yards) Killed Injured Property Crops ARKANSAS, Southwest **Columbia County** Thunderstorm Wind (G52) **Taylor** 1320CST O Trees down in town along CR 18. CALIFORNIA, Extreme Southeast NONE REPORTED. **CALIFORNIA**, North Central CAZ013>014-063-Shasta Lake/North Shasta County - Burney Basin/Eastern Shasta County - Mountains Southwest Shasta 068>069 County To Northern Lake County - Mt Shasta/Western Plumas County - West Slope Northern Sierra Nevada 06 0420PST Winter Storm 1224PST Snow accumulations approached four feet at several Northern Sierra Nevada ski resorts. Mount Shasta reported two feet of new snow. Water equivalents for the event ranged between 2.00 and 6.00 inches. Portions of Interstate 80 and 5 were closed for several hours due to blizzard-like conditions. Portions of Highway 50 and 88 were closed as well due to avalanche patrol. CAZ015>017 Northern Sacramento Valley - Central Sacramento Valley - Southern Sacramento Valley 1130PST Prolonged pre-frontal winds exceeding 50 mph disrupted service for 4,500 PG&E and SMUD customers. Two homes in north Tehama County were damaged. One by an uprooted tree, the other by a large limb. **CAZ069** West Slope Northern Sierra Nevada 1600PST Avalanche 2200PST Four individuals were buried while sledding outside their lakeside cabin near the Sugar Bowl ski resort. Three of the individuals were able to dig themselves out and only sustained minor injuries. The fourth died of cardiac arrest after being trapped in the snow M210T for six hours. **Sacramento County** 0711PST Sacramento 07 Urban/Sml Stream Fld 1005PST Law enforcement officials reported local urban flooding in Sacramento. **Solano County** Vacaville 0711PST Urban/Sml Stream Fld 1005PST Law enforcement officials reported local urban flooding in Vacaville. CAZ013-068>069 Shasta Lake/North Shasta County - Mt Shasta/Western Plumas County - West Slope Northern Sierra Nevada 0430PST Winter Storm 08 Up to 2 feet of snow accumulated across Northern Sierra Nevada ski resorts while 2 1/2 feet accumulated at Mount Shasta. The heavy snow was responsible for the temporary closure of Interstate 80 and Highway 50 on the afternoon of 02/08/99. Sacramento County **Elk Grove** 1300PST An off duty National Weather Service employee reported several inches of water covering the roadway on Elk Grove Boulevard. **CAZ016** Central Sacramento Valley 35K 0940PST Pre-frontal winds were responsible for power outages at more than 11,000 Butte County homes. Six homes were damaged, one severely, by falling trees and limbs. **Shasta County** 5 N Burney 0707PST Urban/Sml Stream Fld 1101PST

Cosgrove Creek left its banks, surrounded four homes, poured into a low-lying golf course, threatened sewage treatment ponds, and

20K

Flash Flood

Burney Creek left its banks and flooded agricultural fields north of town.

0846PST

1300PST

Calaveras County
15 W Bummervile

		Time	Path	Path	Num	ber of	Estimated	February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Pers Killed	sons Injured	Damage Property Crops	Character of Storm
CALIFORNIA, Noi	rth Cen	tral						
		orarily closed F	lighway 26.					
Tuolumne County								
Sonora	09	0930PST 1300PST			0	0		Flash Flood
	Wood	s Creek left its	banks and fl	ooded isolated a	reas of down	town Sono	ora.	
Tuolumne County								
Tuolumne	09	0930PST 1300PST			0	0		Flash Flood
	An un		ry left its banl	ks and flooded is	solated areas	of Tuolun	nne(city of). Sandbagg	ging was required.
Tuolumne County								
Jamestown	09	0930PST 1300PST			0	0		Flash Flood
	An un		ry left its banl	ks and flooded is	solated areas	of Jamesto	own. Sandbagging wa	s required.
Amador County								
Jackson	09	1035PST 1300PST			0	0		Flash Flood
	Jackso		ts banks and	flooded areas of	downtown	Jackson. T	he California Departr	nent of Forestry aided in sandbagging
	and sa	ived downtown	n businesses f	rom damage.				
Amador County		40 2 ED GT						
Sutter Creek	09	1035PST 1300PST			0	0		Flash Flood
	Sutter		banks and flo	oded isolated ar	eas of Sutter	Creek(tov	wn of). Sandbagging v	vas not necessary.
Amador County								
Sutter Creek	09	1045PST 1300PST			0	0		Flash Flood
	An un		ry off of Gopl	her Gulch in the	town of Sutt	er Creek r	ose quickly and toppe	d the Badger Street bridge.
CAZ068>069	Mt S	hasta/Weste	ern Plumas	County - We	st Slope No	orthern S	Sierra Nevada	
	15 16	1546PST 0350PST			0	0		Heavy Snow
			now accumula	ated across high	er terrain and	ski resort	s of the Northern Sier	ra Nevada.
CAZ068>069	Mt S	hasta/Weste	ern Plumas	County - We	st Slope No	orthern S	Sierra Nevada	
	18	0415PST			0	0		Heavy Snow
	10 to	2048PST 14 inches of sr	now accumula	ated across the h	igher terrain	and ski re	sorts of the Northern	Sierra Nevada.
CAZ013>014-063-					C			ountains Southwest Shasta
068>069			nern Lake (County - Mt S	Shasta/Wes	tern Plu	mas County - Wes	t Slope Northern Sierra
	Neva							****
	20 21	1525PST 0325PST			0	0		Winter Storm
		e elevations re		inches of snow	while higher	r terrain re	ceived 2 to 4 feet. Por	tions of Interstate 80 and Highway 50
CAZ013-068>069		temporarily clo		County Mt S	hacta/Was	torn Dlui	mas County Was	t Slope Northern Sierra Nevada
CAZ013-000>009	24	1530PST		Jounty - Mit S	0 0	0	mas County - Wes	Heavy Snow
	25	0900PST						•
CALIEODNIA No-		oot of snow ac	cumulated ac	ross higher terra	iin and ski re	sorts of the	e Northern Sierra Nev	ada and Southern Cascades.
CALIFORNIA, Noi CAZ072		iter Lake Ta	hoo Amoo					
CAZ072	06	0500PST			0	0	0	Heavy Snow
	10	0500PST				v	U	HEAVY SHOW
G170 5 0	•			now at Kirkwoo	od Ski Area.			
CAZ072		ter Lake Ta						••• a
	06 07	0530PST 0530PST			0	0	0	Heavy Snow
			of 18-24 inche	es at Kirkwood S	Ski Resort.			

		Time	Path	Path		iber of	Estimated	February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per Killed	rsons Injured	Damage Property Cro	ops Character of Storm
CALIFORNIA, No	rtheast							
CAZ072	_	iter Lake Ta	ahoe Area					
	06	0530PST	•		0	0	0	Heavy Snow
	10	0530PST		. D. 101' A				
CAZ072		storm total of ter Lake Ta		at Boreal Ski A	Area.			
CAZ072						0		и с
	06 10	0600PST 0600PST			0	0	0	Heavy Snow
	4 day	storm total of	8 feet of snow	at Sierra at Tal	noe Ski Area	a.		
CAZ072	Grea	iter Lake Ta	ahoe Area					
	06	0630PST			0	0	0	Heavy Snow
	10 4 day	0630PST storm total of		of snow at Alp	ine Meadow	s Ski Reso	rt	
CAZ072		iter Lake Ta		01 5110 W 40 1 11p		5 BM 11050		
	06	0730PST	1		0	0	0	Heavy Snow
	07	0730PST						•
C 4 7 0 7 2				s at Boreal Ski	Area.			
CAZ072		iter Lake Ta						
	06 07	0730PST 0730PST			0	0	0	Heavy Snow
				Sierra at Tahoe	Ski Resort.			
CAZ072	Grea	ter Lake Ta	ahoe Area					
	06	0800PST			0	0	0	Heavy Snow
	09 Storm	0800PST		wer the last 3 de	ove in the vi	cinity of R	ockway Summit	elevation 7000 feet.
CAZ072		iter Lake Ta		over the last 5 da	iys iii tiic vi	chility of Bi	ockway Summit,	cievation 7000 feet.
011207 2	06	1000PST			0	0	0	Heavy Snow
	07	0958PST	•					•
G 4 770=4		-			hours above	e Truckee, a	at an elevation of	6500 feet.
CAZ071			Plumas/East	ern Sierra				
	06 Wind	1420PST		oh causing roof	0 damage to h	0 Iomes in Pit	2K	High Wind
CAZ072		iter Lake Ta	-	in causing roof (aumage to m	omes m i n	avillo.	
	07	0800PST			0	0	0	Heavy Snow
	09	0800PST			-	-		
G 4 70 70			of 48-60 inche	s at Tahoe Donr	ner near Tru	ckee, eleva	tion 6500 feet.	
CAZ073	Mon							
	07	1420PST 1720PST			0	0	0	Heavy Snow
	5 inch			d at Mammoth	Lakes, eleva	ation 7500 t	feet.	
CAZ072	Grea	ter Lake Ta	ahoe Area					
	08	0512PST			0	0	0	Heavy Snow
	09 24 ho	0512PST		Sierra at Tahoe	ski resort			
CAZ072		iter Lake Ta		Sicila at Talloc	ski iesoit.			
	08	0514PST			0	0	0	Heavy Snow
	09	0514PST	•			Ü	v	11041.7 5116.11
G 4 70 70				at Kirkwood Sk	i Resort.			
CAZ072		iter Lake Ta						
	08	0538PST 1438PST			0	0	0	Heavy Snow
	12 inc			at Tahoe City, e	levation 630	00 feet.		
CAZ072		iter Lake Ta		•				
	08	0600PST			0	0	0	Heavy Snow
	09	0600PST		s at Northstar Sl	ki Araa			
	2 4 110	ui siiow total	01 12-32 IIICHE	s at ivortiistai Si	ai Aica.			

		Time	Path	Path	Numb		Estimated	l	February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Pers Killed	sons Injured	Damage Property C	Crops	Character of Storm
CALIFORNIA, Noi	theast		, ,				• •	•	
CAZ072		ter Lake Ta	hoe Area						
	08	0620PST			0	0	0		Heavy Snow
	09	0620PST							
C 4 770FA				s at Alpine Mea	dows Ski Re	esort.			
CAZ072		ter Lake Ta							
	08	0720PST 1420PST			0	0	0		Heavy Snow
	8-10 i		fall in 7 hours	in the town of I	Meyers, elev	ation 6340) feet.		
CAZ072	Great	ter Lake Ta	hoe Area						
	08	0810PST			0	0	0		Heavy Snow
	0 inch	1610PST	on 8 hour nori	od in Tahoe Cit	v alayation	6200 foot			
CAZ073	Mono		an o nour pen	od ili Talloe Cit	y, elevation	0300 1661.			
CAZOIS	08	, 2215PST			0	0	0		Heavy Snow
	09	1015PST			U	U	v		Heavy Show
		nches of accu	mulation over	night in Mamm	oth Lakes.	At time of	f spotter report,	heavy s	snow with winds estimated at 50-60
C 4 7 0 7 1	mph.	/IT4 I	N/E4	G:					
CAZ071			Plumas/East	ern Sierra			0		T
	09	0600PST 1025PST			0	0	0		Heavy Snow
	5 inch		4 hours and 30	minutes at Pitt	ville, elevati	on 3300 fe	eet.		
CAZ073	Mono)							
	09	1000PST			0	0	0		Heavy Snow
	10 24 hou	1000PST	of 24 inches at	op Deadman's S	lummit near	Cractuion	7		
CAZ073	Mono		or 24 menes at	op Deadman's S	oummit, near	Clestview	v .		
CHEOTO	09	, 1200PST			0	0	0		Heavy Snow
	0)	1305PST			v	v	Ū		Tieuvy Silow
			l in a 1 hour p	eriod in Colevil	le, elevation	5100 feet	. Strong winds	accompa	anied the snow leaving 6 inch drifts
CAZ071		1 hour.	Plumas/East	onn Cionno					
CAZ0/1	18	1042PST	Tumas/Last	ci ii Sici i a	0	0	0		High Wind (C62)
			3 knots record	ed at Dovle.	0	0	0		High Wind (G63)
CAZ071			Plumas/East						
	18	1200PST			0	0	5K		High Wind
	Semi t	ractor-trailer	blown over on	Highway 395 n	ear Janesvill	le. No inju	uries reported.		G
CAZ072	Great	ter Lake Ta	hoe Area						
	18	1255PST			0	0	0		Heavy Snow
	6 inch	1655PST es of snow in	4 hours at Car	oles Lake, elevat	tion 7798 fee	et			
CAZ073	Mono		. nours at our	200 20110, 010 , 01					
	18	1300PST			0	0	0		High Wind (G56)
	Peak v	wind gust of 6	5 mph recorde	d at Mono Lake					3 (/)
CAZ072	Great	ter Lake Ta	hoe Area						
	20	0530PST			0	0	0		Heavy Snow
	21 24 hou	0530PST	of 24-30 inches	s at Kirkwood S	ki Resort				
CAZ072		ter Lake Ta		s at Kirkwood 5	KI KCSOIT.				
0.120.2	20	1430PST			0	0	0		Heavy Snow
	21	0834PST					Ū		2200.7
C1 70=4				Truckee, elevation	on 5900 feet.	_			
CAZ072		ter Lake Ta							
	20 21	1500PST 0900PST			0	0	0		Heavy Snow
			n 18 hours at T	ahoe City, eleva	ation 6300 fe	eet.			
				•					

		Time	Path	Path	Numl		Estimated	February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Pers Killed	sons Injured	Damage Property Crops	Character of Storm
CALIFORNIA, Nor	theast							
CAZ071		en/Eastern I	Plumas/East	ern Sierra				
	20	1530PST			0	0	0	Heavy Snow
	21	0935PST	101 ' 1	5 7 , 1 1	.: 5000 C			
CAZ072		ter Lake Ta		Westwood, elev	ation 5000 fe	eet.		
CAZ012	20	ner Lake Ta 1600PST	noe Area		0	0	0	H C
	20 21	0600PST			0	0	0	Heavy Snow
	15-21	inches of snov	w in 14 hours	at Alpine Mead	ows Ski Res	ort.		
CAZ071	Lasse	en/Eastern F	Plumas/East	ern Sierra				
	20 21	1600PST 1000PST			0	0	0	Heavy Snow
			n 18 hours in C	Calpine, elevation	on 4958 feet.			
CAZ071		en/Eastern F						
	20	1750PST			0	0	0	Heavy Snow
	21	0940PST	16 h in T)	- 4000 f+			
CAZ071		enes of snow if en/Eastern H		Portola, elevatio	n 4800 feet.			
CALOTI	20	1800PST	Tumas/Last	ci ii sici i a	0	0	0	Heavy Snow
	21	0955PST			U	U	V	Heavy Show
				Sattley, elevation	n 4944 feet.			
CAZ072		ter Lake Ta	hoe Area					
	20	1900PST 2135PST			0	0	0	Heavy Snow
	4 inch		2 hours and 3	0 minutes at Ec	ho Summit,	elevation 7	377 feet.	
CAZ073	Mone	0						
2	20	1910PST			0	0	0	Heavy Snow
	21	1910PST	. 12 houwe et N	Mammoth Lakes	a alazzation 7	7900 foot		
CAZ071		en/Eastern H			s, elevation /	7000 leet.		
CHEVII	20	2140PST	rumus/ Eust	ern blerru	0	0	0	Heavy Snow
	21	0940PST			v	v	· ·	rically show
C + 70 00			12 hours in Pi	ttville, elevatio	n 3300 feet.			
CAZ070	_	rise Valley						
	21	0005PST 1205PST			0	0	0	Heavy Snow
	5 inch		12 hours in Co	edarville, elevat	ion 4630 fee	t.		
CAZ072	Grea	ter Lake Ta	hoe Area					
	25	0600PST			0	0	0	Heavy Snow
	13 inc	1330PST thes of snow in	7 hours and	30 minutes on to	on of Donne	r Summit	elevation 7229 feet.	
CALIFORNIA, Nor			i , ilouis ullu .	50 111111110 5 011 1	op or Bonne		010 (4410)11 (22) 10011	
CAZ004-076			ver - Mend	ocino Interio	r			
	05	1600PST			0	0		Heavy Snow
	06	1300PST	2000 f	in intenien Neu	1	:- 0	M	(2200 fact) manufact 1 (inches Coffee
							gon Mountain Pass Mountain (4000 feet	(3200 feet) recorded 16 inches, Coffee 6 inches.
CAZ002		docino Coas	•	`	,		`	
	06	0500PST			0	0		Other
	G.	1200PST	5 1	1.1		C CD 1	1E1 . C	
		g winds betwee gh the hole dar			ı ırom tne ro	or or Redv	vood Elementary Sc.	hool in Fort Bragg. Rain water entered
CAZ003>004		-		r Trinity Riv	er			
	08	2200PST	••	, ,	0	0		Heavy Snow
	10	0800PST	town beaucht	hoovy anary 4-	tha Nauthr	ot Coliforni	io mountains and	•
			_	•				me snowfall down to sea level. Trinity nty near South Fork Mountain, 17 1/2

	50	———		Citust	141 VV				<u></u>
		Time	Path	Path		ber of	Estima		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Killed	sons Injured	Dama Property	ge Crops	Character of Storm
CALIFORNIA, No	rthwest								
							L		d conditions at 1520 PST on the 9th -
CAZ002-076		ty was reduced locino Coast		vith 30 knot wir no Interior	nas. Numer	ous locatio	ns reported 4	to 6 inch	es.
	09	0400PST			0	0			Flood
	The N	1230PST	looded Highw	yay 128 from t	he mouth to	about 10	milae unetras	m The	Russian River near Hopland flooded
		ay 175 and su			ne mount to	about 10	illiles upstrea	III. THE	Russian River hear Tropiand frooded
CAZ002-076	Mend	locino Coast	t - Mendocii	no Interior					
	16 17	0800PST 0900PST			0	0			Flood
			ooded Highwa	ay 128 and the	Russian Riv	er flooded	Highway 175	near Hoj	pland.
CAZ004	Uppe	r Trinity Ri	ver						
	20	1000PST 2200PST			0	0			Heavy Snow
	Up to		now fell acros	s Trinity Count	y.				
CALIFORNIA, So	uth Cent	<u>tral</u>							
CAZ020>021	Centr	al San Joaq	uin Valley -	Southern Sa	an Joaqui	n Valley			
	02	0200PST 0930PST			0	0			Fog
	Visibil		th Kings and I	Fresno Counties	3.				
CAZ020	Centr	al San Joaq	uin Valley						
	09	0625PST 1400PST			0	0	35K		High Wind (G37)
CAZ022>024	to 40 N ASOS the Co	MPH as a cold site at 1147 P valinga area are mern Sierra I	front moved s PST and a 100 ound 0755 PS	outheastward the year old oak tree.	nrough the a	rea. An esti led in Reed	imated gust o lley around no	f 44 knot oon. A b	on with more gusty wind reports of 30 s occurred at the Fresno Air Terminal lowing dust report was received from ounty Mountains - Kern
		ty Mountaii	ns						
	09	1630PST 2355PST			0	0			Winter Storm
	in the sthis per accomplished from the Fresno reporter Fish C the 8th of the Near V Rainfa foothill Bakers	od of inclement foothills of the riod was mark panying frontate snow and war and another 2 dealong with samp. Tuolum, 9 inches by 18th and 10th with solution 24 incl ll occurring on 1 reporting pointield.	e Southern Sie de by a winte al passage in to vind. In the F 12 were downed aubstantial raine Meadows the 9th, and 20 with Lodgepolnes of snow feen Sunday the 7 ths. San Joaquits. San Joaquits a winter south and sunday the 7 ths. San Joaquits a winter south sunday the 7 ths.	erra Nevada (56 r storm in the h he late morning resno area, powed throughout th hfall amounts su in the Southern O inches reporte le in the Tulare ell on the 9th. In 7th through 080 uin Valley 24-h	5 MPH at Cligher elevated by hours and ver was lost ne area. In the lack as the 1. Sierra New de by 0800 County Months the Kern Cloon the 8th nour rainfall	pakhurst), a cions. Low early after to 27,000 che mountain 75 inches che country ada receive PST on the countains recounty Morn ranged from amounts via	nd events core elevations noon of the Soustomers alo in areas nume of rain in the idea of inches of 10th. Yosem seiving 13 incuntains, Tehaom 2 to 2.5 ir aried from ne	ntinued the had substituted the had substitute	uary with initial reports of high wind trough the 9th. The latter portion of antial rainfall along with gusty wind to 55,000 utility customers lost power power poles blew down in northwest ances of gusty wind to 45 MPH were eriod prior to 1110 PST on the 9th at to 0800 PST on the 7th, 23 inches by red 9 inches of snow by the morning ne morning of both the 8th and 10th. Eviced 12 inches of snow by the 10th. CA Zone 22, Southern Sierra Nevada an at Merced decreasing to 1/4 inch at
CAZ022-024			nevada-Yos	emite Nation		_	_anyon - K	ern Cou	inty Mountains
	09	0722PST 1700PST			0	0			High Wind (G39)
M 1 G	Spotte	r report of sou	theast wind 20	0-30 MPH with	gusts to 45	MPH and j	precipitation	just begin	ning at 0722 PST.
Madera County	00	1/2/DOD			Δ	0			Eumal Claud
12 SE Madera	09	1637PST 1641PST			0	0			Funnel Cloud

		Time Local/	Path	Path Width		ber of	Estim		February 1999
Location	Date	Standard	Length (Miles)	(Yards)	Killed	sons Injured	Dam Property	Crops	Character of Storm
CALIFORNIA, Sout	h Cent	ral							
Fresno County	<u> </u>	<u> </u>							
10 NW (Fch) Chandler Af to 2 NW (Fch) Chandler Af	09	1658PST 1716PST			0	0			Small Hail
	SE of		g) at 1658 F						occurred in Northwest Fresno (4 miles (another 6 miles farther SE) at 1716
CAZ020>021		-	_	- Southern S	an Joaquir	ı Valley			
	11	0400PST 0700PST			0	0			Extreme Cold
	Fresno	County decid	uous area ten	peratures drop	ped to 28 to	32 deg. F.			
CAZ020>021	Centr	al San Joaq	uin Valley	- Southern S	an Joaquir	ı Valley			
	12	0200PST 0800PST			0	0			Extreme Cold
GA 77022 022	-			y deciduous are		_			. 36
CAZ022>023			vevada- Y os	semite Natior		_	Canyon - 1	ulare Co	ounty Mountains
	20 21	2100PST 0400PST			0	0			Heavy Snow
CAZ024		County Mo	ıntains						
	21	1100PST 1600PST			0	0			High Wind (G40)
	elevatio	nne Meadows on but amounts	at the lower		e reported or	ıly at 1-3 i		-	was reported down to the 3000 foot owed the frontal passage early on the
CALIFORNIA, South		in gusto in the	remempr ,	andy up to 101		151.			
CAZ026		s Valley							
	09	1500PST 2200PST			0	0			Heavy Snow
	Heavy	snow fell over	the southern	Sierra droppin	g 10 inches	of snow at	Aspendell d	uring the a	fternoon and evening.
CAZ026-026-026- 026	Owen	s Valley							
	18	1444PST 2100PST			0	0	15K		High Wind (G67)
	observi 65 mph	ng system (AS a. Power lines	SOS) at Bisho were downed	p airport record	ded a peak w were blown o	rind gust o off several	f 60 mph and roofs. An a	the Bisho	nd evening. The automated surface op Fire Department reported a gust of sensor near Independence recorded a
CALIFORNIA, Sout	_	1			C				
CAZ060	Apple	And Yucca	Valleys						
	09	1430PST 1930PST	•		0	0	60K		High Wind (G52)
CAZ048>049-058	San B		County Vall	* *				U	0 mph were reported in Phelan. The Inland Empire - San Diego
	11 12	0230PST 1400PST			0	0	950K		High Wind (G78)
CAZ049	Rivers	side County	Valley/The	Inland Emp	oire				
	11 12	0900PST 0830PST			0	30	150K	100K	Dust Storm
San Bernardino County									
Devore	11	0900PST 1000PST			0	1	60K		Wild/Forest Fire
	_								ego Counties necessitated major road and west of the San Gorgonio Pass.

Strong winds blowing through the mountain passes of San Bernardino, Riverside, and San Diego Counties necessitated major road closures by the California Highway Patrol. Extensive property damage occurred throughout and west of the San Gorgonio Pass. Numerous trees and signs were blown down and into buildings and vehicles, causing further damage. A freshly plowed field just

		Time Local/	Path Length	Path Width	Numbe Perso		Estim Dam		February	1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

CALIFORNIA, Southwest

west of San Gorgonio Pass was stripped of it's top soil, and the blowing dirt was tracked for 15 miles downstream. Approximately 5000 residents of Beaumont were in it's path, 30 of whom were treated for breathing problems and rashes. Elsewhere in Riverside County: a large commerical building in Lake Elsinore was blown down, a 150 foot tall tree was blown over and crushed a trailer home, and winds caused power outages and minor brush fires. Further south, in the Laguna Mountains of San Diego County, trees and power lines blown down between Julian and Buckman Springs, caused road closures, power outages, minor brush fires, and destroying one building. Along Interstate 8, numerous highway signs were destroyed and two tractor-trailor rigs were blown over. The winds temporarily died down the afternoon of Feb. 11, then increased again that evening into the morning of Feb. 12.

CALIFORNIA, Upper

CAZ011

Siskiyou County

07 0800PST

A strong winter storm moved into Southern Oregon and Northern California on this date. Several locations reported snow verifying a Winter Storm Warning. The warning was issued at 1457 LST on 02/05/99 and cancelled at 0515 LST on 02/07/99.

CAZ011-011-011-011

Siskiyou County

09 0816PST 1200PST 0 0 Winter Storm

Spotter SY42 at MacDoel reported 10" snow since midnight.

Spotter in Mt. Shasta City reported 15 inches of snow.

The heavy snow episode over Southern Oregon also affected Siskiyou County in Northern California. Unfortunately, no warning was issued for this area.

CAZ011-011-011-011

Siskiyou County

20 0604PST

0 0 Winter Storm

21 1223PST

Spotter SY-49 at Mt. Shasta City reported 6 inches snow since noon and still snowing.

A Winter Storm Warning was issued for Siskiyou county above 3000 feet at 2127 PST on the 20th. The warning was cancelled at 1108 PST on the 21st.

CALIFORNIA, West South Central

CAZ034>035

San Luis Obispo County Central Coast - Santa Barbara County Central Coast

07 1100PST 0 0

2100PST

Large northwest swell produced heavy surf along the Central California coast. Widespread surf of 8 to 10 feet with local sets to 12 feet was reported.

CAZ059

Antelope Valley

09 1315PST

1500PST

1 Dust Storm

Heavy Surf

Strong westerly winds, gusting to 45 mph, produced a dust storm in the community of Palmdale. The blowing dust reduced visibilities to near zero miles and caused a 12 car pileup near the intersection of Avenue P and 15th Street. Only one minor injury was reported.

0

CAZ040-044>047-053>054

Ventura County Coast - Ventura County Interior Valleys - Ventura County Coastal Valleys - Santa Monica Mountains Recreation Area - Los Angeles County Valleys - Ventura County Mountains - Los Angeles County Mountains Excluding The Santa Monica Range

11 0300PST 0 0 High Wind (G65)

12 1400PST

Strong Santa Ana winds developed across Southern California. The gusty northeast winds produced scattered power outages and other damage. In Canyon Country, a mobile home was destroyed when a 50 foot eucalyptus tree was blown down. In Simi Valley, another house was damaged when a 80 foot eucalyptus tree was blown down. No injuries were reported.

CAZ041 Los Angeles County Coasts Including Downtown Los Angeles

20 1620PST 1 3 High Surf

Higher than normal surf swept four people off of a jetty in San Pedro Bay. Three of the people were rescued. However, the fourth person was pronounced dead after emergency personnel could not find his body.

M21IW

		Time	Path	Path	Num	ber of	Estim	ated	February 1999
		Local/	Length	Width	Per	sons	Dam	age	,
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm

CALIFORNIA, West South Central

CAZ034>035 San Luis Obispo County Central Coast - Santa Barbara County Central Coast

25 2000PST 0 0 Heavy Surf 26 2100PST

Large northwest swell produced heavy surf along the Central California coast. Widespread surf of 8 to 10 feet was reported.

CALIFORNIA, Western

Napa County

North Portion 07 0845PST 0 0 Flood

1145PST

Widespread rain of 4 to 6 inches fell over most of the North Bay Counties with nearly 5 inches in 24 hours near Napa and Santa Rosa.. The Upper Napa River at St Helena crested at 09:41 PST at 13.26 ft. . A number of other small creeks and urban areas recieved some floodiing with some county roads closed by water.

Marin County

Lagunitas 07 1200PST 1 0 24K Heavy Rain

a 70 year old woman was killed 2 miles from Luganitas in Mariun County by a 100 foot tree that fell on her car due to the soggy ground and wind. F70TE

Alameda County

Niles Canyon road closed due to flooding and mud slide due to heavy rain.

CAZ005>007 Sonoma / Marin Counties - San Francisco County - Alameda / Contra Costa Counties

09 1100PST 0 0 1M High Wind (G60)

1415PST

Alameda County

Oakland 09 1400PST 0 0 Hail (0.75)

1410PST

Smal hail fell in and around the Oakland Zoo.

COLORADO, Central and Northeast

COZ035>036-038>040-042-044-049>050 Northern Front Range Foothills/Upper Laramie And Cache La Poudre River Basins - Southern Front Range Foothills/Clear Creek Basin - Eastern Larimer And Northwestern Weld Counties - Eastern Boulder County/Boulder And Vicinity - Denver Metropolitan Area - Northeastern Weld County - Morgan County/Fort Morgan And Vicinity - Washington County/Akron And Vicinity - Sedgwick And Phillips Counties

02 1848MST 0 0 3M High Wind (G110) 03 1015MST

A powerful chinook windstorm struck the Front Range Foothills and adjacent plains. Several locations registered peak wind gusts in excess of 100 mph. Locations to meet or exceeded the century plateau included: 127 mph (110 kts) at Sugarloaf Mountain, 120 mph (104 kts) at Lafayette, 119 mph (103 kts) at Wondervu, 107 mph (93 kts) at Carter Lake, 106 mph (92 kts), 2 miles north of Estes Park, 104 mph (90 kts) at Coal Creek, 103 mph (90 kts) at the Rocky Flats Environmental Test Facility with 100 mph (97 kts) recorded at Longmont and Louisville.

Other peak wind reports included: 97 mph (84 kts) at Boulder, 93 mph (81 kts) at the NCAR Mesa Lab, 89 mph (77 kts) at Red Feather Lakes, 88 mph (77 kts) at Nederland, 86 mph (75 kts) at Aspen Springs, 84 mph (73 kts) atop Niwot Ridge, 83 mph (72 kts) at Blue Mountain, 78 mph (68 kts), 4 miles south of Livermore, 74 mph (64 kts), 1 mile east of Buckhorn Mountain, 64 mph (56 kts), 21 miles north of New Raymer, 61 mph (53 kts) at Evans, 60 mph (52 kts) at Akron and 4 miles east of Haxtun, and 59 mph (51 kts) at Fort Morgan.

The damage associated with the windstorm was extensive. Thirty 70-ft tall power poles were damaged, including several that supported high voltage lines transmitting power directly from generating plants. The combination of downed power poles, power lines and trees resulted in outages for approximately 10,000 residents. In Lafayette, power poles were sheared off for a mile and a quarter stretch. The outages primarily affected residents in Boulder, Broomfield, Lafayette, Louisville and Fort Lupton.

In addition to the outages, high winds ripped apart several roofs in Boulder, including the Boulder County Jail. At Jefferson County Airport, several planes were overturned and some hangers damaged or destroyed. Damage to the airport alone was estimated at \$100,000. Along Interstate 25, just south of the Wyoming border, a tractor-trailer was blown onto its side by strong crosswinds. In southern Jefferson County, localized ground blizzards restricted visibilities to less than 20 feet along U.S. Highway 285, resulting in several accidents. In Pine Junction, a downed tree damaged a nearby residence when it crashed onto the roof. In Bailey, a downed tree crushed a vehicle parked in the resident's driveway.

	Time Local/	Path Length	Path Width	Number of Persons	Estimated Damage	February 1999
Location Dat		(Miles)	(Yards)	Killed Injured	Property Crops	Character of Storm

COLORADO, Central and Northeast

Total damage estimates for the windstorm reached \$3 million, making it the fourth costliest on record in Colorado.

COZ035>036

Northern Front Range Foothills/Upper Laramie And Cache La Poudre River Basins - Southern Front Range Foothills/Clear Creek Basin

07 0030MST 0 0 High Wind (G78) 1200MST

Another round of chinook winds developed in the Front Range Foothills. Peak wind reports included: 90 mph (78 kts) at the NCAR Mesa Lab, 88 mph (77 kts) at Wondervu, 77 mph (67 kts) at Red Feather Lakes and 73 mph (64 kts) at Estes Park.

COZ039>040-042>044-046-048-050 Eastern Boulder County/Boulder And Vicinity - Denver Metropolitan Area - Northeastern Weld County - Southern Weld County/Greeley And Vicinity - Morgan County/Fort Morgan And Vicinity - Eastern Elbert And Northern Lincoln Counties/Limon And Vicinity - Logan County/Sterling And Vicinity - Sedgwick And Phillips Counties

10 1400MST 0 0 High Wind (G58) 1800MST

A vigorous cold front moved through the plains of northeastern Colorado during the afternoon and early evening. Peak wind reports included: 67 mph (58 kts), 21 miles north of New Raymer, 58 mph (51 kts), 15 miles west-northwest of Sterling and 9 miles north of Limon, and 58 mph (50 kts), 4 miles east of Haxtun and at Greeley, 54 mph (47 kts) at Fort Morgan, 52 mph (45 kts), 2 miles north of Loveland and 48 mph (42 kts) at Denver International Airport.

Gusty northerly winds caused numerous outages as power poles, power lines and trees were downed. In Loveland, 250 homes were affected by the outages. In Morgan County, at least 260 homes were without power in the towns of Woodrow and Fort Morgan, as 10 poles were snapped during the windstorm. In addition, downed power lines sparked several fires which burned approximately 80 to 100 acres of wheat. A mobile home was also blown onto its side.

At Denver International Airport, the temperature dropped more than 20 degrees in an hour, following the passage of the cold front. Dangerous wind shear conditions at DIA delayed several flights while others were redirected to Colorado Springs. In Montbello, strong winds blew off the roof of a building. More downed power lines sparked a small brush fire, which burned about 10 acres near the former Fitzsimmon's Army Medical Center.

COZ038-040>041-043 Eastern Larimer And Northwestern Weld Counties - Denver Metropolitan Area - Eastern Douglas And Western Elbert Counties/Castle Rock And Vicinity - Southern Weld County/Greeley And Vicinity

10 1800MST 0 0 0 Winter Storm 11 0000MST

Heavy snow developed over southern sections of the Denver Metropolitan Area and along Monument Ridge during the evening hours. Snowfall totals included: 6 inches at Eaglecrest, 6.5 inches at Highlands Ranch and 4 miles northwest of Larkspur, and 8.5 inches, 5 miles south-southeast of Sedalia.

Although snowfall totals elsewhere only ranged from 1 to 3 inches, strong gusty winds caused near blizzard conditions to develop in eastern Larimer County as well as western and southern portions of Weld County. Whiteout conditions were reported at Ault, Eaton, Greeley, Kersey, Keenesburg and along U.S. Highway 85 south of Greeley. Numerous accidents were reported, one which resulted in a fatality.

COZ032>034

Middle Park - Rabbit Ears & Medicine Bow Ranges/Rocky Mountain National Park - Summit County/Mosquito Range/Indian Peaks

17 1800MST 0 0 Winter Storm 2230MST

A fast, but potent, Pacific storm system struck portions of the northern mountains. Snow fell at a rate of 2 inches an hour and some locations with snowfall totals ranging from 5 to 9 inches. Strong winds, with gusts generally ranging from 50 to 60 mph, caused whiteout conditions. In fact, a peak wind gust to 77 mph (66 kts) was reported in Silverthorne. As a result, Interstate 70, west of Georgetown, was closed for several hours.

Snowfall totals included: 9 inches at St, Mary's Glacier, 8 inches at Berthoud Pass, Loveland Pass and Winter Park, 7 inches at Hot Sulphur Springs, 6 inches at Copper Mountain and University Camp, with 5 inches at Lake Eldora and Loveland Ski Area.

COZ035>036-038>040 Northern Front Range Foothills/Upper Laramie And Cache La Poudre River Basins - Southern Front Range Foothills/Clear Creek Basin - Eastern Larimer And Northwestern Weld Counties - Eastern Boulder County/Boulder And Vicinity - Denver Metropolitan Area

17 2125MST 0 0 0 High Wind (G78) 18 0030MST

Following the passage of the storm system, damaging bora winds developed in and near the Front Range Foothills. Peak wind

		Time Local/	Path Longth	Path Width		ber of sons	Estim			February 1999
	_		Length				Dam		Cl	
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

COLORADO, Central and Northeast

reports included: 90 mph (78 kts) at the Gamow Tower on the Boulder Campus, 79 mph (69 kts) at the NCAR Mesa Lab and the National Wind Technology Center (NWTC), 7 miles west of Broomfield, 75 mph (65 kts) at Carter Lake, 72 mph (63 kts) at Blue Mountain and Jefferson County Airport and 71 mph (61 kts), 5 miles south of Fort Collins.

Downed power lines caused major outages in Evergreen, Idaho Springs, Golden and Lakewood. The outage affected at least 10,000 residents. In Golden, the wind toppled a "lightning static protection" line atop a 70-ft, 230,000 volt distribution tower. The downed line, sparked a small grass fire just east of the Lookout Mountain Youth Services Center. The fire burned a path approximately 100 yards wide and a third of a mile long before it was contained.

COZ033>034

Rabbit Ears & Medicine Bow Ranges/Rocky Mountain National Park - Summit County/Mosquito Range/Indian Peaks

21 1800MST 0 0 Winter Storm 22 1800MST

Another Pacific storm system brought strong winds and more heavy snow to portions of the northern mountains. Snowfall amounts included: 17 inches at Keystone, 13 inches at Breckenridge, 12 inches at Copper Mountain, 11 inches at Loveland Ski Area, with 10 inches at Arapahoe Basin and Berthoud. Near whiteout conditions were reported at Cameron Pass.

COZ035>036-038>040-042-044>046 Northern Front Range Foothills/Upper Laramie And Cache La Poudre River Basins - Southern Front Range Foothills/Clear Creek Basin - Eastern Larimer And Northwestern Weld Counties - Eastern Boulder County/Boulder And Vicinity - Denver Metropolitan Area - Northeastern Weld County - Morgan County/Fort Morgan And Vicinity - Eastern Adams And Eastern Arapahoe Counties - Eastern Elbert And Northern Lincoln Counties/Limon And Vicinity

22 0515MST 0 0 0 High Wind (G76) 1530MST

Strong post frontal or bora winds developed in and near Front Range Foothills, spreading out into portions of northeast plains. Peak gusts included: 87 mph (76 kts) at Golden Gate Canyon, 84 mph (73 kts) at West Fort Collins and Wondervu, 80 mph (70 kts) at the NCAR Mesa Lab, 75 mph (65 kts) at the Rocky Flats Environmental Test Facility, 74 mph (64 kts) at Carter Lake, Jefferson County Airport and 9 miles west-southwest of Rustic, 72 mph (63 kts) at the Gamow Tower on the CU Campus, and 60 mph (52 kts) at Bennett, Hereford and Fort Morgan, and 59 mph (51 kts), 9 miles north of Limon.

COZ035-039>040

Northern Front Range Foothills/Upper Laramie And Cache La Poudre River Basins - Eastern Boulder County/Boulder And Vicinity - Denver Metropolitan Area

22 1815MST 0 0 0 High Wind (G71) 23 0310MST

Chinook winds developed on a very localized scale overnight in and near the foothills of northern Jefferson and southern Boulder Counties. Peak wind reports included: 82 mph (71 kts) at the Rocky Flat Environmental Test Facility, 80 mph (70 kts) at the NCAR Mesa Lab, 77 mph (67 kts), 4 miles east- northeast of Nederland, and 75 mph (65 kts) at the Gamow Tower on the CU Campus.

COLORADO, East Central

NONE REPORTED.

COLORADO, South Central and Southeast

COLORADO, South Central and Southeas

COZ067-071>072 Teller County/Rampart Range/Pikes Peak - Southern El Paso County/Colorado Springs And Vicinity - Northern El Paso County/Monument Ridge

02 2300MST 0 0 30K High Wind (G68) 0 1000MST

A weather disturbance developed a strong pressure gradient across eastern Colorado. Winds gusted between 60 and 80 mph overnight through midmorning in the Pikes Peak region. A semi-truck hauling half of a mobile home was blown over on I-25 just north of Colorado Springs. Wind restrictions for high- profile vehicles were in effect for I-25 at the time. The truck knocked down a light pole, which ignited a small grass fire. Numerous small power outages were reported, and burgler alarms were set off by the high winds in southeast Colorado Springs.

COZ061 Eastern San Juan Mountains

04 2300MST 0 0 Heavy Snow 05 1000MST

A swift southwest airflow and a weather disturbance brought heavy snow to the eastern San Juan mountains overnight through midmorning of the 5th. Three to 6 inches of snow fell over the lower elevations, while 6 to 8 inches occurred on the passes and high peaks. The summit of Wolf Creek Pass tallied 10 inches of new snow.

COZ074 Upper Huerfano River Basin/Walsenburg And Vicinity

05 0637MST 1 0 30K High Wind (G60)

Strong west winds, generally gusting to 50 mph, were occurring over the Walsenburg area the morning of the 5th. An isolated gust,

		Time	Path	Path		Number of		ated	February 1999
		Local/	Length	Width	Per	sons	Dam	age	•
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm

COLORADO, South Central and Southeast

of unknown magnitude, but estimated at just under 70 mph, overturned a semi-truck hauling half a mobile home. The driver died at the scene of massive head and chest injuries. Wind restrictions for high-profile vehicles were in effect at the time. M34VE

COZ061 Eastern San Juan Mountains

10 0300MST 0 0 Heavy Snow 2200MST

A strong weather disturbance brought heavy snow to Mineral county in the eastern San Juan mountains. Some areas in the higher elevations received over 8 inches of snow. From 4 to 7 inches of snow fell in the Creede area and in and around South Fork.

COZ065>068-070>075 Northern Sangre De Cristo Mountains - Southern Sangre De Cristo Mountains - Teller County/Rampart Range/Pikes Peak - Western Fremont And Northern Custer Counties - Wet Mountains - Southern El Paso County/Colorado Springs And Vicinity - Northern El Paso County/Monument Ridge - Pueblo And Eastern Fremont Counties/Pueblo And Vicinity - Upper Huerfano River Basin/Walsenburg And Vicinity - Upper Purgatoire River Basin/Trinidad And Vicinity

A strong weather disturbance brought a period of high winds to the southeast mountains and adjacent plains. A few wind gusts over 80 mph occurred in the mountains and over 70 mph in the adjacent plains. In Woodland Park, in Teller county, a part of a roof of a building supply store was ripped off, and several power lines were downed, causing local power interruptions. In the Colorado Springs area, north of town, a truck and towed modular home flipped over and a semi-trailer was tipped over on I-25. There were a few power outages due to downed trees or limbs in the area as well. In the Pueblo area, a truck and towed modular home were blown off I-25 just south of Pueblo. Several small grass fires temporarily were out of control, one consuming 1,500 bales of hay near Avondale. A large downed tree crushed a vehicle in downtown Pueblo. One airline canceled a couple of flights, stranding about 100 passengers. Farther east, in Otero county, burns started by local residents were fanned out of control by winds gusting to around 50 mph. Several residences and other buildings were threatened in the Fowler area. Ironically, the winds blew the poorly anchored roof off the Fowler Fire Department. In the Lamar area, a fire to burn weeds started by employees of a company west of town, threatened a 69-kilovolt power line for several hours. And, part of the roof on an elementary school was ripped off in Springfield by winds approaching 60 mph.

COZ066-070-072-074 Southern Sangre De Cristo Mountains - Wet Mountains - Northern El Paso County/Monument Ridge - Upper Huerfano River Basin/Walsenburg And Vicinity

10 1600MST 0 0 Heavy Snow

11 0700MST

A surge of cold, moist air from the north brought a period of heavy snow accumulations to parts of the southeast mountains and adjacent plains. On Monument Ridge, north of Colorado Springs, up to 6 inches of snow was recorded. Four to 6 inch amounts were common in the Wet mountains, southern Sangre de Cristo mountains, and in the Walsenburg area.

Prowers County

3 S Lamar Arpt 17 1500MST 0 0 Wild/Forest Fire

1900MST

A cold front brought gusty winds over 50 mph to the Lamar area in the late afternoon, sparking a large wildfire. Over 7,500 acres were scorched just south of Lamar, but there was no damage to structures.

COZ061 Eastern San Juan Mountains

21 2200MST 0 0 Heavy Snow 22 0400MST

A strong weather system moves through southern Colorado late at night on the 21st into early morning of the 22nd. Heavy snow fell in the eastern San Juan mountains in the higher elevations. The summit of Wolf Creek Pass picked up 3 inches of snow, and Santa Maria Reservoir had 4 inches of accumulation.

COZ071-073 Southern El Paso County/Colorado Springs And Vicinity - Pueblo And Eastern Fremont Counties/Pueblo And Vicinity

22 0830MST 0 0 7K High Wind (G52) 1000MST

High winds occurred over the plains adjacent to the mountains in eastern Colorado in the early morning. In downtown Colorado Springs a sign on the Holly Sugar building was damaged. In Canon City, a roof on a mobile home was partially peeled off.

COLORADO, West

COZ004>005-009-012-017-019>023 Elkhead And Park Mountains/Flat Tops/White River Plateau - Upper Yampa River Basin/Steamboat Springs And Vicinity - Grand And Battlement Mesas - West Elk And Sawatch Mountains/Taylor Park - Uncompangre Plateau - Southwestern San Juan Mountains - Paradox Valley/Lower Dolores River - Four Corners/Upper Dolores River/Cortez And Vicinity - Animas River Basin/Durango And Vicinity - San Juan River Basin/Pagosa Springs And Vicinity

A moist southwest flow ahead of a Pacific storm system produced 8 to 12 inches of snow in most mountain areas of western

		Time Local/	Path Length	Path Width		ber of sons	Estim Dam		February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm

COLORADO, West

Colorado. Some lower elevation areas received 6 to 10 inches of snow, especially in the southwest corner of the state. Strong southwest winds in some mountain areas produced blowing and drifting snow.

COZ012

West Elk And Sawatch Mountains/Taylor Park

06 1900MST 3 1 Avalanche 1902MST

A group of 4 college students were caught in an avalanche which was triggered by one of the skiers while traversing a slope just below the summit on Cumberland Pass, which is about 25 miles east-northeast of Gunnison in the Sawatch Mountain Range. The entire slope at the 12,000 foot elevation fractured 6 feet deep and 1500 feet across and ran 400 vertical feet, scouring the snow along the slope all the way to the ground. The skier who triggered the avalanche was buried next to a tree which provided an air space that was crucial to his survival. The other three students which included a snowmobiler, a snowboarder, and another skier perished under the snow. This was the deadliest avalanche in Colorado since 1988. M19OU, M2OOU, M22OU

COZ001>005-009>010-012-017>019

Lower Yampa River Basin/Rangely And Vicinity - Central Yampa River Basin/Craig-Hayden And Vicinity - Roan And Tavaputs Plateaus - Elkhead And Park Mountains/Flat Tops/White River Plateau - Upper Yampa River Basin/Steamboat Springs And Vicinity - Grand And Battlement Mesas - Gore And Elk Mountains/Central Mountain Valleys/Aspen And Vicinity - West Elk And Sawatch Mountains/Taylor Park -

Uncompangre Plateau - Northwestern San Juan Mountains - Southwestern San Juan Mountains

 10
 0500MST
 0
 0
 Winter Storm

 11
 1800MST
 0
 0
 Winter Storm

A Pacific trough produced 6 to 12 inches of snow in the mountains of western Colorado. 6 to 10 inches of snow also fell on the lower elevations of northwest Colorado. The heaviest reported amounts were 14 inches at Powderhorn Ski Area and 13 inches at Steamboat Springs Ski Area. Strong winds in the mountains resulted in blizzard-like conditions. Some peak wind gusts included 88 MPH at the top of Telluride Ski Area, 85 MPH at the top of Steamboat Springs Ski Area, 74 MPH in the mountains near Sunlight Ski Area, 66 MPH on the Tavaputs Plateau, and 65 MPH on the Uncompahgre Plateau.

COZ010-015

Gore And Elk Mountains/Central Mountain Valleys/Aspen And Vicinity - Leadville And Vicinity

17 1700MST 0 0 Blizzard 18 0300MST

Strong winds and heavy snow combined to produce blizzard conditions in some mountain areas of west-central Colorado. Interstate 70 was closed from the Minturn exit eastward beyond Vail Pass. Colorado Highway 24 between Minturn and Leadville as well as Colorado Highway 91 between Copper Mountain Ski Area and Leadville were also closed. Snow drifts of 2 to 3 feet deep developed in some areas. A peak wind gust to 57 MPH occurred at the Leadville airport, while higher gusts were estimated at other

COZ004-010-015

Elkhead And Park Mountains/Flat Tops/White River Plateau - Gore And Elk Mountains/Central Mountain Valleys/Aspen And Vicinity - Leadville And Vicinity

21 1200MST 0 0 Winter Storm

22 1900MST

locations.

A moist westerly flow produced 8 to 12 inches of snow in some mountain areas of northwest and west-central Colorado. Some heavier amounts included 14 inches at Cooper Ski Area and 13 inches at Beaver Creek Ski Area. Winds up to the 40 to 50 MPH range produced areas of blowing and drifting snow.

CONNECTICUT, Northeast

Hartford County

Southington 02 2100EST 0 0 Flood 03 1100EST

Ouinnipiac River

Low pressure moving from the Carolinas to southern New England brought 1 to 2 inches of rain to northern Connecticut. Very wet antecedent conditions caused significant rises on small streams throughout the region. The Quinnipiac River at Southington rose out of its banks late on the 2nd, producing minor flooding to low lying areas along the river. It crested at 4.17 feet around 3 am on the 3rd, which is less than one foot above its flood stage of 3.5 feet. There were no reports of flood damage.

CTZ002 Hartford

12 1900EST 0 0 Record Warmth

The high temperature of 54 degrees at Bradley International Airport in Windsor Locks, reached during the early evening, tied the record high for the date which was set in 1984.

CTZ003>004 Tolland - Windham

25 0000EST 0 0 Heavy Snow

26 0000EST

A strong low pressure system, which passed about 200 miles southeast of Cape Cod, brought heavy snow to Tolland and Windham Counties. Snowfall amounts generally ranged from 6 to 10 inches, with as much as 10.5 inches reported in East Killingly. There were no reports of damage or significant impact from this storm.

		Time	Path	Path	Num	ber of	Estim	ated		February 1999
	Local/	Local/	Length	Width	dth Persons		Damage		Ť	
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

CONNECTICUT, Northwest

CTZ001 Litchfield

02 1730EST 0 0 Flash Flood/Flood 2300EST

Mild temperatures and rain produced rapid melting of snow on February 2. This runoff resulted in minor flooding of the East Aspetuck River.

CONNECTICUT, Southern

Fairfield County

•					
Trumbull	02	1500EST	0	0	Heavy Rain
Middlesex County					
Middletown	02	1600EST	0	0	Heavy Rain
New London County					
Countywide	02	1700EST	0	0	Heavy Rain
New Haven County					•
Wallingford	02	1751EST	0	0	Flood
, , <u></u>	04	0231EST	Ü		11004

A combination of a nearly stationary warm front lying just southwest of Connecticut and a low pressure system approaching slowly north-northeast along the coast produced heavy rain that caused flash flooding of the Quinnipiac River at Wallingford and isolated flooding of low-lying and poor drainage areas across the rest of Southern Connecticut.

In New Haven County, the Quinnipiac River at Wallingford rose above its' flood stage of 7 feet at 5:51 pm on February 2nd. The river crested at 9.14 feet at 10:46 pm on the 2nd and finally fell below flood stage by 2:31 am on February 4th.

Heavy rain fell across Southern Connecticut. Reported rainfall amounts ranged from 1.28 inches at Stevenson Dam in Fairfield County to 4.02 inches at Oakdale in New London County.

More than 3 inches was reported at several locations:

In Fairfield County, 3.49 inches was reported at Trumbull.

In New Haven County, 3.71 inches was reported at Bethany; 3.29 inches at Woodbridge; 3.07 inches at Seymour; and 3.05 inches at Meriden.

In Middlesex County, 3.62 inches was reported in Middletown.

In New London County, 4.02 inches was reported at Oakdale and 3.77 inches at Norwich.

CTZ008-011>012

Northern New London - Southern Middlesex - Southern New London

25 1400EST 0 0 Heavy Snow 26 0000EST

With a cold high pressure system covering New England, as a strong low pressure system passed east of Long Island, it produced heavy snow.

Light snow began around 1 am on February 25th along coastal New London County and became heavier as it slowly spread west and north across the region. The heaviest snow fell across coastal New London County. Snowfall amounts ranged from around 7 inches at Old Saybrook to 8 inches at Groton.

DELAWARE

DEZ001 New Castle

01 0000EST 0 0 0 0 Drought 02 0900EST

The combination of the recent heavy precipitation during January and the mild temperatures that allowed water to soak into the soil and raise ground water levels permitted the Delaware River Basin Commission to lift their drought warning. The drought warning was in effect north of the Chesapeake and Delaware Canal. While streamflow and ground water levels recovered, they were still below normal for the month of February. February monthly precipitation totals on a county weighted average ranged from normal in New Castle County to around 1 inch (65 to 72% of normal) below normal in both Kent and Sussex Counties.

Kent County

1 W Clayton 12 1730EST 0 1 200K 0 Thunderstorm Wind

		Time	Path	Path	Num	ber of	Estim	ated	February 19	99
		Local/	Length	Width	Per	rsons	Dam	age		
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

DELAWARE

A severe thunderstorm destroyed three mobile homes and injured one person on Hollett's Corner near Clayton. The 67-year-old man was injured when he became trapped within his destroyed mobile home. Two other homes were blown off their foundation and a few other mobile homes suffered minor damage. Damage was estimated at \$200,000. Elsewhere across northern Kent County, several trees were knocked down, one electrical pole was knocked down and tree limbs were snapped in a Smyrna Elementary School Playground. An unseasonably warm air mass and a strong cold front conspired to produce a line of strong to locally severe thunderstorms. Preceding this line, high temperatures soared to record breaking levels at both the New Castle County Airport (71 degrees, previous record 61 degrees set in 1898) and Dover Air Force Base (70 degrees, previous record 65 degrees set in 1965).

Sussex County

Georgetown 12 1910EST

12 1910EST 0 0 0 Thunderstorm Wind (G50)
A squall line of strong to locally severe thunderstorms moved through Sussex County and knocked down several trees and power lines in and around Georgetown. An unseasonably warm air mass and a strong cold front conspired to produce a line of strong to locally severe thunderstorms across southern Delaware. Preceding this line, the high temperature soared to 70 degrees in Georgetown.

DISTRICT OF COLUMBIA

District Of Columbia

Northeast Portion 12 1630EST 0 0 5K Thunderstorm Wind

Brick wall blown over and part of roof blow off building

A strong cold front swept across the region during mid-afternoon on the 12th, accompanied by thunderstorms with damaging wind and a temperature drop of nearly 30 degrees. Washington Reagan National Airport recorded a wind gust of 41 MPH as thunderstorms moved through around 4:15 pm. The strong wind accompanying the storms was blamed for damage in northeast Washington. A brick wall was blown over and a portion of building's roof was blown off in the 11000 block of Bladensburg Road around 4:30 PM.

FLORIDA, East Central

Brevard County

Patrick Afb 28 1515EST 0 0 Thunderstorm Wind (G52)

Thunderstorm winds produced a wind gust to 60 mph at Patrick AFB.

FLORIDA, Extreme Southern

NONE REPORTED.

FLORIDA, Northeastern

Duval County

Herlong Arpt 12 1435EST 0 0 Hail (0.75)

Columbia County

Lake City 28 0705EST 0 0 5K Thunderstorm Wind

Auto parts store had roof damage.

0923EST

FLORIDA, Northwest

Gulf County

Beacon Hill 28 0430EST 0 0 200K Thunderstorm Wind

Straight-line winds caused scattered damage in the vicinity of Beacon Hill and St. Joe Beach. Two homes received moderate to severe roof damage. A neighboring vehicle was damage by a fallen power pole. Minor roof and privacy fence damage, as well as a few downed trees in the Beacon Hill and Gulfaire subdivisions. The entrance gate to Beacon Hill Park was damaged. Numerous road signs and markers damaged along Highway 98 in Beacon Hill. At Helmut St. and Highway 98, a vacation home roof and garage were leveled.

FLORIDA, Southern

Broward County									
Tamarac	09	1814EST			0	0	0	0	Funnel Cloud
	A sher	iff's deputy report	ed a funnel o	cloud.					
Monroe County									
2 E Key West Intl Arpt	10	1538EST			0	0	0	0	Waterspout
_	NWS ₁	personnel observe	d a waterspo	out two miles ea	ast of Key	West Inter	national Air _l	port.	
Palm Beach County									
Boca Raton	18	0915EST	2	10	0	0	0	0	Tornado (F0)

		Time	Path	Path		ber of	Estim		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per Killed	sons Injured	Dam Property	age Crops	Character of Storm
FLORIDA, Southern						3	1 7		
Palm Beach County									
Boca Raton	18	1005EST	1	5	0	0	0	0	Tornado (F0)
Doca Raton	10	1010EST	1	3	U	U	U	U	Tornado (Fo)
	and so toward	outhern Palm B d the east north	each counties east before lif	s. One tornado	was first si tornado wa	ghted nea	r Glades Ro	ad and U.	west to east across northern Broward S. 441 and travelled about two miles cipal Airport travelling about one mile
FLORIDA, West Cer	<u>itral</u>								
FLZ039-042>043-	Levy	- Citrus - Su	mter - Her	nando - Pasc	o - Pinella	s - Hillsb	orough - I	Polk - Ma	anatee - Hardee - Highlands -
048>052-055>057-	Saras	sota - De Soto	o - Charlott	te - Lee					
060>062-065									
	04	0300EST 0900EST			0	0	0	0	Fog
	Dense		sibility to less	than one quart	er mile over	most of W	est Central a	and South	west Florida.
FLZ049>052- 055>057-060>062- 065	Pasco	- Pinellas - 1	Hillsboroug	gh - Polk - M	anatee - H	Iardee - I	Highlands	- Saraso	ta - De Soto - Charlotte - Lee
	07	0300EST			. 0	0	0	0	Fog
EL 7020 042, 042		-		than one quart					
FLZ039-042>043- 048>052-055>057- 060>062-065		- Citrus - Su sota - De Soto			o - Pinelia	is - Hillsd	orougn - 1	701K - IVI	anatee - Hardee - Highlands -
	08	0100EST 0900EST			0	0	0	0	Fog
	Dense	fog reduced vis	sibility to less	than a quarter	mile over pa	arts of Wes	t Central and	d most of S	Southwest Florida.
FLZ039-042>043- 048>052-055>057- 060>062-065	_	- Citrus - Su sota - De Soto			o - Pinella	ıs - Hillsb	orough - I	Polk - Ma	anatee - Hardee - Highlands -
	09	0100EST 0900EST			0	0	0	0	Fog
EL 7020 042, 042		•	•	than a quarter					
FLZ039-042>043- 048>052-055>057- 060>062-065		- Citrus - Su sota - De Soto			o - Pinelia	is - Hillsd	orougn - 1	OIK - MI	anatee - Hardee - Highlands -
	10	0300EST 0900EST			0	0	0	0	Fog
	Dense		sibility to less	than a quarter	mile over m	ost of Wes	t Central and	d parts of S	Southwest Florida.
FLZ039-043-052- 056>057-061	Levy	- Sumter - P	olk - Harde	ee - Highland	s - De Sot	0			
	11	0300EST 0900EST			0	0	0	0	Fog
	Dense	fog reduced vis	sibility to less	than a quarter	mile over pa	arts of Wes	t Central Flo	orida.	
Levy County									
Countywide	14	0500EST 0700EST			0	0	0	0	Freeze
	Tempo half.	eratures droppe	d below free	zing for up to t	wo hours o	ver the nor	thern half o	f the coun	ty and hour or less over the southern
FLZ039-042>043- 048>052-055>057- 060>062-065		- Citrus - Su sota - De Soto			o - Pinella	s - Hillsb	orough - I	Polk - Ma	anatee - Hardee - Highlands -
	19	0100EST 0900EST			0	0	0	0	Fog
	Dense	fog reduced vis	sibility to less	than a quarter	mile over m	ost of coas	tal and parts	of inland	West Central and Southwest Florida.

Storm Data and Unusual Weather Phenomena Number of Time Path Path Estimated February 1999 Local/ Length Width Persons Damage Character of Storm Standard (Miles) (Yards) Killed Injured Property Crops FLORIDA, West Central FLZ039-042>043-Levy - Citrus - Sumter - Hernando - Pasco - Pinellas - Hillsborough - Polk - Manatee - Hardee - Highlands -048>052-055>057-Sarasota - De Soto - Charlotte - Lee 060>062-065 0100EST 26 0 Fog 0900EST Dense fog reduced visibility to less than a quarter mile over most of West Central and parts of Southwest Florida. FLORIDA, West Panhandle **Escambia County** Pensacola Regional 23 1845CST 0.1 20 Tornado (F0) 1846CST A pilot saw a tornado briefly touch down on airport property. No damage was found. Santa Rosa County 3 W Holley to 23 1900CST 0 Waterspout 1 W Holley A waterspout was sighted over East Bay moving toward the Holley area. The waterspout dissipated before reaching land. **GEORGIA**, East Central NONE REPORTED. **GEORGIA**, Lower **Brantley County** 0700EST Hoboken 28 0 2.5K Thunderstorm Wind Large trees and power lines were blown down. GEORGIA, North and Central GAZ008>009-Union - Towns - Dawson - Lumpkin - White - Hall - Banks 014>016-023>024 01 0000EST 0 0 Freezing Rain/Sleet 0900EST A mixture of rain, freezing rain, and sleet continued from the afternoon of January 31st into the morning of February 1st. Accumulations were mostly in higher elevations on trees and power lines. Road surface temperatures were generally above freezing, but some icing did occur on bridges and overpasses. **Fulton County** 6 SW Sandy Spgs to 1512EST 0 Hail (0.75) 09 0 6 S Sandy Spgs 1515EST The Marietta Fire Department reported dime size hail near I-75 and West Paces Ferry Road. The public reported dime size hail near the governor's mansion on Dumbarton Road in Buckhead. De Kalb County 1 SW Lithonia 1535EST Hail (0.75) The public reported dime size hail. De Kalb County Lithonia 09 0 Hail (0.75) Another public report indicated nickel size hail. **Rockdale County** Conyers to 09 1615EST 0 Hail (0.75) 2 S Convers 1620EST Several public reports indicated dime size hail in Rockdale county. The hail covered the ground in some areas. Also, 2 to 3 inches of rain fell within 30 minutes, according to 2 reports. Whitfield County **Tunnel Hill** 09 1900EST 5K Lightning Lightning caused minor fire damage to a home in Tunnel Hill when it struck a cable line. **Murray County**

Lightning caused extensive fire damage to a home on Mount Carmel Church Road.

30K

20K

Lightning

Lightning

Chatsworth

Rockdale County Conyers

10

0300EST

		Time Local/	Path Length	Path Width	Numl Pers		Estimated Damage	February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property Crops	Character of Storm
GEORGIA, North a	nd Cer	<u>ıtral</u>						
GAZ001>009-011- 011>016-019>025- 027-030>038- 041>046-055	occup Dade Picke Madi	ant was taken - Walker - ens - Dawso ison - Polk -	to the hospita Catoosa - V n - Lumpkii Paulding -	l, suffering from Whitfield - Mu n - White - Fl Cobb - North	n smoke inha Irray - Far oyd - Barto I Fulton - O	lation. nnin - Gil ow - Che Gwinnett	lmer - Union - To rokee - Forsyth -	re was extensive smoke damage. On wns - Chattooga - Gordon - Hall - Banks - Jackson - te - Oconee - Oglethorpe -
	23	1100EST			0	0		Snow
	the aft adviso Ogleth upper Georg	ternoon. A wi ory eventually norpe. Temper 20s to lower ia before the	rain and snow nter weather a was expander ratures were in 30s, snow be precipitation	ndvisory was issed by early in the upper 30s gan accumulating	sued for the ne morning of to mid 40s, s ng in patchy laybreak on	counties a of the 24th so the snow areas. On	long and north of a land to include counties with did not stick at first e to two inches of si	and gradually spread eastward during line from Polk to White counties. The as far south as Carroll to Clayton to t. As temperatures slowly fell into the now accumulated over much of north 3 inch amounts in higher elevations
Floyd County								
Rome to	27	2140EST			0	0	30K	Thunderstorm Wind
4 S Rome			ator reported a	tree down on a				trees down on Pleasant Valley Road i
Haralson County			·					
Countywide	27	2140EST 2150EST	•		0	0	25K	Thunderstorm Wind
		•	-	es and power ling the area east and				derstorm winds. A HAM radio operate
Polk County								
Cedartown to Rockmart			ported several	trees blown do				Thunderstorm Wind Antioch Road in Cedartown. A HA!
Paulding County			Ĭ					
New Hope	27 The p	2215EST ublic reported		ail or larger. A t	0 ree was also	0 reported b	olown down in Dallas	Hail (1.00)
Carroll County								
Villa Rica	27 The p	2220EST ublic reported		inch size hailp	0 probably arou	0 und dime s	size.	Hail (0.75)
Douglas County								
Douglasville	27 Dougl	2230EST las county 911		e and power lin	0 e blown dow	0 n by thun	1K derstorm winds.	Thunderstorm Wind
Bartow County								
Allatoona	27 The n	2235EST		Bartow county:	0 near Acwortl	0 h in Cobb	county	Hail (1.00)
Cobb County	The p	done reported	1 men nan m	Durtow county	neur rie word	ii iii cooo	county.	
Kennesaw to	27	2239EST	,		0	0		Hail (1.00)
Smyrna	A cou			ed nickel to qua	rter size hail	fell in Col	bb county. A large tre	e fell on a swing set in Austell, cutting
Cherokee County	10 111 11	air.						
Woodstock	27	2240EST 2250EST			0	0		Hail (1.50)
	Public	reports indic	ated hail from	dime size to 11	1/2 inches in	diameter.		
Bartow County		22.157.5			•		477	TO 1
Cartersville	27 Bartov	2245EST w county 911		ls on trees blow	down.	0	1K	Thunderstorm Wind
De Kalb County								
La Vista	27	2245EST	1		0	0	1K	Thunderstorm Wind

		Time	Path	Path		ber of	Estim		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Killed	sons Injured	Dam Property	age Crops	Character of Storm
GEORGIA, North an	nd Cen	tral							
			reported trees	knocked down	by thunders	torm winds	on LaVista	and Briar	cliff Roads.
Troup County									
La Grange	27 Troup	2254EST	ceived reports	of several tree	0 es down and	0 nower outs	1K		Thunderstorm Wind
Cherokee County	Houp	county 7111c	cerved reports	or severar tree	os down and	power out	ages.		
Greeley to	27	2255EST			0	0	10K		Thunderstorm Wind
Woodstock									e Bartow county line. A public report
Clayton County	maicai	led many trees	down in a pas	sture near woo	ustock. Thei	e was also	a report of	power inte	s knocked down.
3 W Jonesboro	27	2308EST			0	0			Thunderstorm Wind (G52)
	A HA	M radio opera	tor reported a	measured wind	speed of 60	mph.			
Fulton County									
Atlanta	27 Fulton	2308EST	enorted trees d	own and power	0 Outages at 0	0 Old Fairbu	10K rn Road and	Phayton F	Thunderstorm Wind
			erry and North		outages at v	old I alloui	in Road and	T Haxton F	toau,
Fayette County									
Peachtree City	27	2312EST	1 1 1 1	1 '1	0	0			Hail (1.00)
Forsyth County	The pu	iblic reported	1 inch diamete	er naii.					
5 W Cumming	27	2315EST			0	0	1K		Thunderstorm Wind
v ,, cumming			reported trees	down west of C	•	-		line.	Thunderstorm vyma
Gwinnett County									
Lilburn	27	2315EST	:	- f-11 1	0	0	10K	4 Dl 1 -	Thunderstorm Wind
		spaper report eckenridge.	indicated a tre	e ieii on a nou:	se on Jennin	gs way on	Jimmy Car	ter Biva, a	and a tree fell on a car at Arbor Drive
Meriwether County		C							
Countywide	27	2330EST			0	0	10K		Thunderstorm Wind
Dile County	Meriw	ether county 9	11 reported tr	ees and power	lines down o	countywide	. A mobile l	nome was	damaged 10 miles east of Greenville.
Pike County Williamson	27	2340EST			0	0	1K		Thunderstorm Wind
vv illianison			orted trees dov	vn in the north					Thunderstorm wind
Spalding County									
Griffin	27	2350EST			0	0	1K		Thunderstorm Wind
GEORGIA, Northea		ng county 911	reported pow	er lines were b	lown down.				
GAZ017		rsham							
GILLOT	01	0000EST			0	0			Ice Storm
		0600EST	1 . 6				. 6.11	c .	
	damag	ing levels in H	labersham cou	-	y trees and p	ower lines		_	ain. The freezing rain accumulated to age was in Cornelia, but enough trees
GAZ010-018-026		n - Stephens	-	organization unit	ity disruption				
	01	0000EST 0600EST			0	0			Freezing Rain
		_		me of sub-free ccrued up to 1/	_				used precipitation to fall as freezing
GAZ010-017>018- 026-028>029		-		ens - Frankli		-	, during the	carry morr	ing nours.
3_0 0_0/ 0 <u>_</u>	24	0000EST 0600EST			0	0			Snow
	northea betwee	k surface low ast Georgia ea	rly on the 24th	h. Most areas i ed across parts	eceived only	y a trace to	one inch. I	However, t	th lift to produce light snow across here was one band of accumulations ery slick, even where only 1/2 inch of

snow fell, resulting in numerous traffic accidents.

		Time	Path	Path		ber of	Estimated		February 1999)
		Local/	Length	Width	Per	sons	Dam	age	·	
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	_

GEORGIA, Southeast

NONE REPORTED.

GEORGIA, Southwest

NONE REPORTED.

GEORGIA, West Central

GAZ089 Muscogee

01 0000EST 0 0 0 0 Drought 28 2359EST

The monthly rainfall for February was 1.77 inches. That amount tied for the fifth lowest monthly total for February ever recorded.

HAWAII

HIZ001>006 Kauai - Oahu - Maui - Island Of Hawaii - Molokai - Lanai

01 0000HST 0 0 High Surf

Swell from the north of the Hawaiian Islands produced surf of 4 to 6 feet along north shores.

HIZ004 Island Of Hawaii

01 0000HST 0 0 Ulight Snow 0730HST

Snow showers were observed over the summit, which led to the closing of the road to the Mauna Kea summit.

HIZ001>006 Kauai - Oahu - Maui - Island Of Hawaii - Molokai - Lanai

02 2030HST 0 0 0 High Surf 05 2030HST

An increasing trade wind swell produced surf of 6 to 10 feet along east shores of all the Hawaiian islands.

HIZ001>006 Kauai - Oahu - Maui - Island Of Hawaii - Molokai - Lanai

A storm that passed to the north of the Hawaiian islands generated large swells from 10 to 15 feet along north shores, and 4 to 6 feet along west shores of the islands.

HIZ003 Maui

03 1100HST 0 0 High Wind (G59) 04 0400HST

High winds toppled eucalyptus trees near Seabury Hall and along Kaupakalua Road. A large tree near Seabury Hall broke two power poles, leaving 125 customers in the Olinda area along Piiholo Road without electrical service. Another falling eucalyptus tree was blamed for snapping conductor wires along Kaupakalua Road that affected about 50 homes in that area and Kokomo. At 8:00 pm at Haleakala, the peak gust was 68 mph and the highest sustained wind speed was 48 mph.

HIZ001>006 Kauai - Oahu - Maui - Island Of Hawaii - Molokai - Lanai

08 1200HST 0 0 High Surf

00 1200HST

An open ocean swell from a storm near Japan generated surf of 8 to 12 feet along north shores of the Hawaiian islands.

HIZ001>006 Kauai - Oahu - Maui - Island Of Hawaii - Molokai - Lanai

12 0415HST 1 0 High Surf

14 0830HST

Two separate storm systems-one near Japan and one near the Gulf of Alaska-produced 8 to 12-foot surf along many north-facing beaches of the Hawaiian Islands.

On Oahu, a Marine's (military) body was never found after a four-day search at sea. He had been walking on a rocky ledge at the Mokulua islands (a mile offshore from Lanikai) when a wave knocked him into the ocean on 12 February. M21IW

HIZ001>006 Kauai - Oahu - Maui - Island Of Hawaii - Molokai - Lanai

16 0300HST 0 0 High Surf

18 0830HST

An intense storm south and east of New Zealand caused surf of 6 to 10 feet along south shores of all Hawaiian Islands. The New Zealand storm on 10 February had 50-knot winds and was 5,400 miles south of Hawaii, moving from Antarctica toward South America. On Oahu, high surf tore loose a navigational buoy marking the Ala Wai Boat Harbor channel. Lifeguards reported 20 rescues-mostly in the Waikiki area. A veteran surfer at Black Point reported that he was among about 25 surfers that were riding waves up to 20 feet on the morning of 16 February.

		Time	Path	Path	Num	fumber of Estimated		ated	February 1999)
		Local/	Length	Width	Per	sons	Dam	age	,	
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	_
•										•

HAWAII

HIZ001>006 Kauai - Oahu - Maui - Island Of Hawaii - Molokai - Lanai

16 0830HST 0 0 High Surf

19 1200HST

Swells from a storm far northwest of the Hawaiian Islands caused surf of 6 to 10 feet along the north and west shores of the islands.

Hawaii County

Hawi to 20 0515HST 0 0 Urban/Sml Stream Fld Halaula 2000HST

Heavy showers, over the district of North Kohala, caused widespread flooding of low lying areas and landslides. A landslide in the Kapa'au area caused a boulder to block half of highway 270 at mile marker 24.

Hawaii County

Honokaa to 20 0815HST 0 0 Urban/Sml Stream Fld
Pahala 2000HST

Minor flooding and small debris on roads were observed for this event, including ponding of water in low-lying areas.

Hawaii County

Honokaa to Hilo 20 1830HST 0 0 Urban/Sml Stream Fld 22 0750HST

Upper level trough and moist unstable airmass produced heavy rain that caused minor flooding along the island's entire east coast. There were crop damages due to runoff and erosion, including pot holes on roads. Bayfront soccer field was flooded with water from the overflow of Alenaio flood channel.

The total amount of rainfall for this event is as follows:

WSO Hilo 11.03 in.
Waiakea Uka 9.43 in.
Mt. View 9.80 in.
Pahoa 10.18 in.
Keaau 13.26 in.

HIZ002 Oahu

20 2025HST 0 0 Dust Devil

A house in Nanakuli sustained wind damage from what appeared to be a huge dust devil or vortex of strong winds. The foundation of the house was lifted off and twisted, while nearby homes were barely touched. There was a lot of debris in the air.

HIZ004 Island Of Hawaii

21 1430HST 0 0 Heavy Snow

22 1000HST

Upper level trough and moist unstable airmass produced heavy snow that fell over the summits of Mauna Kea and Mauna Loa. Snow depth of 5 to 6 inches was reported by UH-Hilo personnel.

HIZ002 Oahu

25 2200HST 1 0 High Surf

26 1600HST

A fisherman was reported missing on the night of 25 February, but his body was later found on 26 February at 4:00 pm on the north side of Kaena Point. Police reported that the victim went in his boat, and it apparently capsized because of rough water. Surf was from 4 to 6 feet along north shores.

M55BO

HIZ001>006 Kauai - Oahu - Maui - Island Of Hawaii - Molokai - Lanai

26 1200HST 0 0 High Surf

28 2359HST

A deep storm that passed far to the north of the Hawaiian islands generated large surf from 20 to 25 feet on 16 February, along north shores of some of the islands.

On Oahu, water was observed across low-lying sections of the road at Laniakea. A house at KeWaena Road was flooded with water, and the family left for a nearby shelter at Sunset beach school. There was a report of debris across the road from Laniakea to Sunset Beach, which was deposited by very high surf along the north shore.

IDAHO, Extreme Southeast

NONE REPORTED.

		Time	Path	Path		iber of	Estim		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Killed	rsons Injured	Dam Property	Crops	Character of Storm
IDAHO, North									
IDZ005>006	Nort	hern Clearv	vater Mount	ains - South	ern Clear	water Mo	untains		
	Pierce Cottor Lolo I	-6 inches new nwood-8 inche Pass-11 inches	ches new snow snow s new snow new snow		0	0			Heavy Snow
IDZ005>006- 009>010		hern Clearv hi County	vater Mount	ains - South	ern Cleary	water Mo	untains - \	Western	Lemhi County - Eastern
0072010	06 07 Saddle Elk Bi Meade	0400MS7 1530MS7 e Mountain-7 i utte-6 inches n	inches new sno new snow ches new snow		0	0			Winter Storm
IDZ005>008			vater Mount almon River		ern Clear	water Mo	untains - (Orofino /	Grangeville Region - Lower
	Grang	1250MST 2115MST 1-8 inches new eville-11 incheshine-12 inches	r snow es new snow		0	0			Heavy Snow
IDZ005>006	Nort	hern Clearv	vater Mount	ains - South	ern Clear	water Mo	untains		
	Cool (Hemlo Elk B	utte-15 inches	of new snow s of new snow nches of new s		0	0			Heavy Snow
IDAHO, Northwest									
IDZ001-003-027			ndle - Idaho	Palouse - Lo			Nez Perce		
IDZ002>004-026	Marie	s, Kellogg and	5" each day w	The heavy sno	w caused ha	azardous dr	iving conditi	ions and s	Heavy Snow tes included: Sandpoint, Potlatch, St. everal accidents on area roadways.
1D2002>004-020	02	1100PST	irca - Iuano	1 alouse - Co	0	0	3M	Lewiste	High Wind
IDZ001	Strong	1700PST g winds of 30	of and building	0				orth Idaho	, causing countless trees to be blown
				~ ,				upon Sch	Winter Storm wietzer Mountain which lead to the
Benewah County	азарі	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	010 104114 2 1 1			juiiesi		
Tensed	24 25 Heavy	0030PST 0900PST y rain caused I	Hangman Cree	k to flood.	0	0	250K		Flood
Latah County			-						
Troy to Juliaetta		0100PST 0900PST nbination of ra ern Latah Cou	apid snowmelt	and heavy rai	0 n caused sm	0 all streams	1M to flood and	d roadway	Flood s to pool with water especially across
IDZ004			nty. He Mountair	ıs					
	25	2100PST 2330PST			0	0	20K		Avalanche

								_ :
		Time Local/	Path Length	Path Width	Numl Pers	ber of sons	Estimated Damage	February 199
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property Crops	Character of Storm
IDAHO, Northwest								
IDAUO Southoost	An ava	alanche on Jac	kass Ridge b	uried roads in th	ne area.			
IDAHO, Southeast IDZ019	Unne	r Snake Hig	hlande					
IDZ01)	02	1500MST			0	0		Heavy Snow
	03	0800MST						•
				basin and Her unty reported 5			Targhee National Fo	orest. Island Park reported 14 incl
IDZ018>019-				• •			ral Highlands - C	aribou Highlands - Big And
022>023-031>032				Lost River / I			J	
	06	0930MST			0	0	40K	Winter Storm
	07 A win	1200MST ter storm brou	ight widespre	ead heavy snow	to the mou	intains of	Eastern Idaho. Ele	vations above 6000 feet in the are
	includi	ing Sun Valley	, the Stanley	Basin to Island	Park and the	Teton Ba	sin, reported 8 to 13 in	nches accumulation. Lower elevation
								nches at Ketchum. Other communti ad Park with 9 inches and Arco with
	inches.	. Numerous st	tate highways	were closed du	uring the stor	rm from b	lowing and drifting sa	now as sustained wind speeds reach
				aused numerous inches at location				f Southeast Idaho also reported hea
IDZ018>019-023-								Little Wood River Region -
031>032		River / Pahs		ð			0	ð
	09	0500MST			0	0	40K	Winter Storm
Bingham County	10	0400MST						
3 S Pingree	09	1735MST			0	0	10K	Thunderstorm Wind (G60)
Bonneville County	-				Ü	Ū	1011	manacistorm (Fina (G00)
6 NE Idaho Falls	09	1845MST			0	0		Thunderstorm Wind (G60)
								lation was generally reported in the accumlation of up to 12 inches we
	reporte	ed in Sun Valle	ey and the St	anley Basin. Ic	y roads resul	lted in nur	nerous slide offs, incl	uding more than 30 along I-84 alon
								d this storm helped trigger rare wint farm irrigation piping, near Pingree
							of a farm lambing she	
IDZ019-031	Uppe	r Snake Hig	hlands - Bi	g And Little	Wood Rive	er Regio	n	
	16	1700MST			0	0	120K	Heavy Snow
	17 Heavy	1700MST snow fell in		evations from the	he Sawtooth	to the Bi	g Hole Mountains.	Accumulation of 6 to12 inches we
	reporte	ed above 7000	feet; while w	idespread accur	mulation of	up to 3 inc	ches were reported at	lower elevations. The high proper
	_	e costs associa and wind in Ca	_	storm occurred	l when over	a mile of	80' high transmission	lines were knocked over from hea
IDZ018>019			•	r Snake High	lands			
	18	1100MST		Ü	0	0		Heavy Snow
	19 Heavy	0300MST	ha highar ald	wations from th	a Sawtooth	Mountain	s to the Unner Sneke	Highlands. Accumulation of 6 to
	-	were reported	-		ie Sawtootii	Wiountain	s to the Opper Shake	riiginands. Accumulation of 6 to
IDZ018>019-	Sawto	ooth Mounta	ains - Uppe	r Snake High	lands - Big	g And Li	ttle Wood River F	Region - Lost River / Pahsimer
031>032	21	0500MCT			0	0		TT /* 4 C4
	21 22	0500MST 0700MST			0	0		Winter Storm
	A wint	ter storm brou						eton Basin. Accumulation of 8 to
	inches snow.	were reported	at Ketchum,	Arco and Asht	on. Many s	tate highv	vays in this region we	ere closed due to blowing and drifti
IDZ019		r Snake Hig	hlands					
	25	2200MST			0	0		Heavy Snow

Heavy snow fell from Teton Basin to Henrys Lake. Accumulation 6 to 8 inches were reported at Victor and Island Park.

	Sto	orm Da	ita and	l Unusu	ıal Wo	eathe	r Phenome	ena
		Time	Path	Path		ber of	Estimated	February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Pers Killed	sons Injured	Damage Property Crops	Character of Storm
IDAHO, Southwest			()	(" " " ")		J	Tray rate	
IDZ012>013	Lowe	r Treasure '	Vallev - Boi	ise Mountains	s			
	02	0800MST 1400MST	-		0	0		Heavy Snow
IDZ014	Upper	r Treasure V	Valley					
	02	0800MST 1400MST			0	0		Winter Storm
	Treasur disrupt local re	the day on Fore Valley and ions. Over 10 eport of 7 inch	the Boise N 0 auto accide es at Midvale	Mountains. In the nts were reported. In the Boise M	ne Upper Tr ed around B Iountains Pla	reasure Va oise. In thacerville re	alley 3 to 4 inches of the Lower Treasure Val eceived 6 inches of new	
IDZ011-013- 028>029	West	Central Mo	untains - B	oise Mountai	ns - Cama	s Prairie	e - Owyhee Mounta	ins
	06	0300MST 1700MST			0	0		Heavy Snow
	at man	now fell over y locations. In	the Boise Mo	ountains Center	ville receive	d 5 inches	. In the West Central N	The snow added up to heavy amounts Mountains 14 inches fell near Council n the Owyhee Mountains Silver City
IDZ011-013- 028>029	West	Central Mo	untains - B	oise Mountai	ns - Cama	s Prairie	e - Owyhee Mounta	ins
	08 09	1500MST 1300MST			0	0		Heavy Snow
ID 7010	A large City re- In the reporte	e and slow mo ceived 11 inch Boise Mounta d 14 inches of	nes. In the We nins Idaho Ci snow.	est Central Mour ty received 12	ntains New I	Meadows 1	received 12 inches and	aho. In the Owyhee Mountains Silver and McCall reported 10 to 12 inches. thes. On the Camas Prairie Fairfield
IDZ030		ern Twin F	•	•				****
	09	1800MST 2200MST			0	0		Winter Storm
			_	•		_	conditions in Southern tate 84 for a few hours	Twin Falls County. About 30 minor .
IDZ011-013-029	West	Central Mo	untains - B	oise Mountai	ns - Owyh	ee Moun	ntains	
	16 17	2000MST 0500MST			0	0		Heavy Snow
	A wint	er storm depo	sited 10 inche				wyhee Mountains. In cerville received 10 inc	the West Central Mountains 6 inches ches of new snow.
IDZ016	Weste	ern Magic V	alley					
	17	2000MST 2030MST			0	0	50K	High Wind (G54)
	winds damag	ng cold front s toppled two s ed and a manu	swept through sixty foot tall afactured hom	pine trees and ne was blown ov	destroyed th			at the Twin Falls Airport. The strong Twin Falls the roof of a school was
IDZ013-028	Boise	Mountains	- Camas Pr	airie				
	18	0600MST 2000MST			0	0		Heavy Snow
	-						·	Placerville and Centerville received 6 ier Mountain received 8 inches.
IDZ011-013- 028>029	West	Central Mo	untains - B	oise Mountai	ns - Cama	s Prairie	e - Owyhee Mounta	ins
	21	0000MST 1200MST			0	0		Heavy Snow
	Cascad	er storm dum le received 6 i	nches of snov	w. In the Boise	Mountains	8 inches fo		Central Mountains Smith's Ferry and o 6 inches fell at Centerville. On the inches.

West Central Mountains - Boise Mountains - Owyhee Mountains

IDZ011-013-029

23 0

0400MST 1300MST **Heavy Snow**

A winter storm dumped heavy snow upon the mountains of southwest Idaho. In the West Central Mountains Smith's Ferry received

	Ste	orm Da	ata and	l Unusu	ıal W	eathe	r Phe	nome	ena
		Time	Path	Path	Num	ber of	Estin	nated	February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)		sons Injured	Dam Property		Character of Storm
IDAHO, Southwest									
									eived 10 inches with Lowman picking
ILLINOIS, Central	up 8 II	nenes and Croi	ich 11 inches.	In the Owyhee	Nountains	Silver City	received 10	inches of	new snow.
ILZ051	Sang	amon							
	11	1425CST 1500CST			0	0	5K		High Wind
									car was blown off the tracks and in ge was estimated around \$5,000.
Scott County	Spring	Sileia allere me		roor damage to	,	Supreme	Jourt Burian	.g. Dum	50 was estimated around \$2,000.
Glasgow to	11	1425CST			0	0			Thunderstorm Wind (G63)
Alsey	down.	. Five miles n	orth of Alsey		vere blown o	lown, a she	ed was destr	oyed, and	oles in the Glasgow area were blown two homes sustained minor damage. ported.
Cass County									
Beardstown	11 Sever	1428CST al trees were b	lown down in	Reardstown	0	0		0	Thunderstorm Wind
Morgan County	Beven	ar trees were b	iowii dowii iii	Deardstown.					
Lynnville to Jacksonville	11	1430CST 1440CST			0	1		0	Thunderstorm Wind
	sustain the co	ned major roo	f damage and sheds were ei	a window in a	restaurant v	vas blown	in causing o	ne minor	red. In Jacksonville, four businesses injury from flying glass. Throughout les blown down, and a chimney was
Tazewell County						_			
3 SW Delavan to 2 NE Morton	11	1523CST 1545CST			0	6	40K		Thunderstorm Wind (G51)
	off of South and a in Tro Count	a corn crib and Pekin, around swing set was emont a semitywide numero	d flipped over a dozen powe blown over. ' was blown o ous trees were	r an irrigation r er poles were bl Two miles nort over on Route	rig 3 miles so lown down a cheast of Mo e 9 near the and several	outhwest o and six mile rton, 6 sem interchan sheds, ba	f Delavan thes south of This were blow ge with I-1 rns, and ou	remont the vn over or 55. No	east across the county, it took the roof he roof off of a house in Delavan. In e tops of numerous trees were torn off in I-74 causing 6 minor injuries. Also, injuries occurred with this incident. were either damaged or destroyed.
Mclean County									
2 SW Bloomington to Bloomington	11	1600CST 1610CST			0	0		0	Thunderstorm Wind
		ni was blown o vas blown over			ge on the so	uthwest sid	le of Bloomi	ngton. No	o injuries were reported. Also, a large
Woodford County	tice w	as blown over	across vetera	ns rankway.					
1 W Minonk	11 A sem	1600CST ni was blown o	ver by thunde	rstorm winds o	0 n I-39 just w	0 vest of Min	onk. No inj	0 uries repoi	Thunderstorm Wind rted.
Shelby County			•		·		·	•	
Shelbyville to Stewardson	11	1627CST 1640CST			0	0		0	Thunderstorm Wind
		elbyville, nume al porch roofs.			n down. In	Stewardso	n, one roof	of a home	was completely ripped off as well as
Champaign County		1	J	T					
Ivesdale to	11	1650CST 1700CST			0	0			Thunderstorm Wind (G52)

YMCA was damaged and railroad crossing arms were broken at 2 crossings. No injuries reported and no damage estimate was available.

11 1657CST 0 0 0 Thunderstorm Wind (G67)

In Ivesdale, a garage was blown 20 feet off its foundation. Three miles south of Champaign, several trees and power poles were blown down. Also, 3 houses sustained siding damage and a motor home was blown over. In Champaign, part of the roof of the

47

1705CST

1700CST

Champaign

Coles County

Mattoon to

Coles Co Mem Arpt

		Time	Path	Path	Numl		Estim		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Pers Killed	sons Injured	Dam Property	age Crops	Character of Storm
ILLINOIS, Central									
	Severa	al power poles	were blown d	own in Mattoor	n.				
Edgar County									
5 W Paris to Paris	11	1740CST 1745CST		1: kl	0	0		0	Thunderstorm Wind
Vermilion County	Nume	rous power poi	es and power	lines were blov	wn down.				
1 N Fithian to Hoopeston	11	1740CST 1750CST			0	1		0	Thunderstorm Wind
Hoopeston		ni was blown o		,				r injuries.	In Danville, several windows on a
G-1 G4	busine	ess were broker	and in Hoop	eston several p	ower poles w	vere blown	down.		
Coles County	27	1240CCT			0	0			II-9 (1.00)
2 N Lerna to Charleston	27	1240CST 1300CST			0	0			Hail (1.00)
Cumberland County									
Toledo	27	1335CST			0	0			Hail (1.75)
Edgar County		422 E CCC							
Hume	27 The h	1335CST ail caused some	e minor dama	ge to a few hor	0 nes and vehice	0 cles in the	Hume area.		Hail (1.75)
Effingham County				6					
3 W Effingham	27	1337CST			0	0			Hail (1.00)
Effingham County									
Watson	27	1407CST			0	0			Hail (1.75)
Clay County	2=	1426000							TT 11 (1.00)
5 NW Flora to Flora	27	1436CST 1440CST			0	0			Hail (1.00)
Richland County									
Olney to	27	1500CST			0	0		0	Thunderstorm Wind
1 N Parkersburg	Severa	1510CST al large trees w	ere blown do	wn in Olney.	One mile no	rth of Park	tersburg, a ti	railer hom	e sustained minor damage and a shed
H I INOIC Name		estroyed.							
ILLINOIS, Northeas	<u>[</u>								
Lee County Dixon	11	1400CST			0	0			Thunderstorm Wind (G52)
DIAGII			a house in D	ixon. A wind g	ust to 60 mp	h was repo	rted at Com	pton Airpo	
Ogle County									
Byron	11	1420CST		1 D	0	0			Thunderstorm Wind (G50)
Winnebago County	ree i	imos and wires	were downed	d near Byron ar	ia Mit. Morri	s.			
Rockford	11	1430CST			0	0			Thunderstorm Wind (G59)
			r lines were d	owned in Rock	ford, Loves		New Milford	. A trailer	was crushed by a falling tree.
Boone County									
Poplar Grove	11 A mai	1445CST intenance build	ing at highwa	y 76 and 173 w	0 as damaged	0 by thunde	rstorm wind	s.	Thunderstorm Wind (G50)
De Kalb County									
De Kalb	11 Trees	1445CST were blown do	wn		0	0			Thunderstorm Wind (G50)
Mchenry County	11005	were brown do	*****						
Woodstock	11	1500CST			0	0			Thunderstorm Wind (G50)
7 7 1 1 6	Shing	les were blown	off a house a	nd tree limbs w	vere blown de	own in Wo	odstock and	Lake in th	ne Hills.
Kankakee County	44	154500m			^				m 1
Aroma Park	11 A stor	1545CST rage building w	as damaged i	n Aroma Park.	The roof of a	0 an industria	al building w	vas damag	Thunderstorm Wind (G50) ed in Bradley.

		Time Local/	Path Length	Path Width	Number of Persons		Estimated Damage		February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm

ILLINOIS, Northeast

Will County

Peotone 11 1550CST 0 0 Thunderstorm Wind (G50)

A greenhouse was damaged at Peotone. Tree limbs and power lines were blown down in Monee.

ILZ023-033 Kankakee - Iroquois

 $11 \hspace{0.5cm} 1600 CST \hspace{0.5cm} 0 \hspace{0.5cm} High \ Wind \ (G59)$

1700CST

Very strong winds occurred in the wake of a small line of thunderstorms. Trees were blown down around Watseka and a barn was damaged in the southwest part of Iroquois County. The brick facade of a building was blown down in Watseka. A wind gusts of 68 mph was recorded in Watseka at 410 pm and 66mph was recorded by an observer in Bonfield at 427 pm. These wind gusts may have been stronger that the winds that occurred in thunderstorms about 30 to 60 minutes earlier.

ILLINOIS, Northwest

Whiteside County

South Portion 01 1305CST 0 0 Flash Flood 2300CST

Unusually warm late January weather caused an early snowmelt along the Rock River in Northwest Illinois. As the river rose an ice jam developed along a tight bend in the river and forced water over portions of route 78 between Prophetstown and Lyndon.

Hancock County

Carthage	11	1246CST 1254CST	0	0		Thunderstorm Wind (G52)
Jo Daviess County						
Elizabeth	11	1322CST	0	2		Thunderstorm Wind (G58)
Jo Daviess County						
Woodbine to Warren	11	1325CST	0	0	40K	Thunderstorm Wind (G70)
Jo Daviess County						
Stockton	11	1337CST	0	1		Thunderstorm Wind (G55)
Stephenson County						
Dakota	11	1346CST	0	0		Thunderstorm Wind (G52)
Whiteside County						
Sterling	11	1402CST 1433CST	0	1	28K	Thunderstorm Wind
Whiteside County						

An intensifying squall line ahead of a strong cold front sent severe thunderstorms racing across Eastern Iowa and Northwest Illinois. Widespread damage from high winds and hail was reported across Southeast Iowa into Northwest Illinois as the storms moved northeast. Several high profile vehicles were overturned by the strong winds, and many downed trees, damaged homes, and farm buildings were reported. In Jo Daviess County two people were injured when the roof was blown off their home, and another man sustained injuries when the semi he was driving was blown over. In Whiteside County one student was injured when strong winds tore a portion of roof off a high school.

Thunderstorm Wind (G58)

ILLINOIS, South

Sterling Arpt

ILZ087-090>094

Gallatin - Pope - Hardin - Alexander - Pulaski - Massac

01 0001CST 0 0 30K Flood

17 1800CST

The Ohio River remained well above flood stage into early February. The river crested at Shawneetown in late January, but did not crest from Golconda downriver to Cairo until the first few days of February. At Golconda, where flood stage is 40 feet, the crest was 45.38 feet. At Brookport, where flood stage is 37 feet, the crest was 46.50 feet. At Grand Chain, where flood stage is 42 feet, the crest was 51.10 feet. Cairo crested at 49.47 feet, nearly 10 feet over flood stage. All points fell below flood stage by mid month. The crests between 5 and 10 feet over flood stage produced minor to moderate flooding. The primary affected areas were agricultural bottomlands. Roads and parks along the river were also affected, including Fort Massac State Park in Metropolis. At Cairo, a stage of 50 feet prompts the closure of the first flood gate.

ILZ081-084 Franklin - Jackson

01 0001CST 0 0 6K Flood

21 0800CST

The Big Muddy River remained above flood stage at Murphysboro from late January through much of February. The flooding was generally minor, affecting uninhabited agricultural and recreational areas. A few houses just downstream of Bridge Street were affected. The crest at Murphysboro was 25.76 feet on the 12th, which is about 10 feet above flood stage. Upriver at Plumfield, the river crested about 2 feet above the 20-foot flood stage on the 10th.

	Sto	orm Da	ata and	l Unusu	ıal We	eathe	r Phenon	nena
		Time	Path	Path		ber of	Estimated	February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Pers Killed	sons Injured	Damage Property Crop	66
ILLINOIS, South			()	(= ====)				
ILZ083	White	e.						
122000	01	0001CST			0	0	3K	Flood
	24 The L	1700CST):		<i>C</i> I 1'	in late Te		ala daring Educate The Little Websel.
				rmi on the 24th	-	; iii iate ja	muary, receded slov	vly during February. The Little Wabash
ILZ076	Wayr	ne						
	01	0200CST			0	0	2K	Flood
	03 The Sl	0900CST cillet Fork Riv	er rose above	flood stage for	r a couple of	days in r	esponse to heavy ra	nin over central Illinois. At Wayne City,
	where	flood stage is	15 feet, the cre	est was 17.03 fe	eet, which ca	used mino	or flooding of low-ly	ring and agricultural areas.
ILZ075>078- 080>082-084-087- 089>094-165-181- 193-199		rson - Wayn in - Alexand			Perry - Fr	anklin -	Hamilton - Jack	son - Gallatin - Johnson - Pope -
	07	0230CST			0	0	23K	Strong Winds
	sufficie nursing	ent to bring dog g home and da	own some tree amaged the ro	limbs and ever	n a few rotted County, dama	d or older	trees. In McLeansb	of southern Illinois. These winds were oro in Hamilton County, a tree fell on a chool, where a light pole at the baseball
ILZ076	Wayr	ne						
	07 10	0400CST 0800CST			0	0	3K	Flood
			tral Illinois ca	used the Skillet	Fork to rise	above flo	ood stage for a coup	ole of days. At Wayne City, where flood
D C 4	stage is	s 15 feet, the c	rest of 17.92 f	eet produced or	nly minor flo	oding of l	ow-lying areas.	
Perry County	25	1400.000					4077	
Conant	blown		rds into trees	east of the trail				Thunderstorm Wind A trailer was destroyed, and debris was f was damaged, trees were down, and a
Franklin County								
6 S Sesser	27	1420CST			0	0		Hail (1.00)
Jackson County								
Murphysboro Williamson County	27	1433CST			0	0		Hail (0.88)
Cambria	27	1438CST			0	0		Hail (0.75)
Johnson County		1100001			v	Ü		Tium (dive)
Goreville to Vienna	27	1500CST			0	0		Hail (0.75)
, 1011111	Hail u	p to three-quar	rters of an incl	n in diameter oc	ccurred in the	e Vienna a	and Goreville areas.	
Hamilton County								
3 W Dale	27	1510CST			0	0	20K	Thunderstorm Wind
Saline County	A barr	n was blown d	own.					
Harrisburg	27	1535CST			0	0	100K	Thunderstorm Wind (G70)
J	A seve were t	ere thundersto clown out of a	a business. Si e businesses s	gns were blowi	with winds n down or d	estimated amaged, a	near 80 MPH. A round a car was blown	oof was blown off a house, and windows n off the road. In downtown Harrisburg narter of its roof, which damaged about a
Wabash County								
Lancaster to Allendale	27	1537CST			0	0	50K	Thunderstorm Wind (G61)
		lerstorm wind ted elsewhere	-	imated by spot	ters to be arc	ound 70 M	IPH. A barn was blo	own down near Allendale, and trees were
Perry County	иргоос	.ca ciscwiicie	in the county.					
Du Ousin	27	1 <i>545C</i> CT			0	0	50V	Liabtuina

0

0

Du Quoin

27

1545CST

50K

Lightning

		T	D. d	D. d	NY .		F. (. 1	F.1 1000
		Time Local/	Path Length	Path Width		ber of sons	Estimated Damage	February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property Crops	Character of Storm
ILLINOIS, South	Liohtu	ina atmuala a hay	vaa aattima it	ahlaga Tha har	vaa amdita a	omtomto vv	ama a total loss	
ILLINOIS, Southwe	_	iing struck a no	use, setting it	ablaze. The hor	use and its c	contents we	ere a total loss.	
Brown County	<u>50</u>							
Mt Sterling	11	1400CST			0	0		Hail (1.00)
Brown County								
Mt Sterling	11 Storm	1400CST spotters reporte	d trees down	and 1 inch hail	. 0	0		Thunderstorm Wind (G55)
Calhoun County								
1.4 WNW Mozier to 8.6 NNE Mozier	11	1404CST 1412CST	9	100	0 Divor west	0 of Magica	300K	Tornado (F2) ast for about 9 miles across Calhoun
	County home a blown with or anothe	y, IL. The torna as it crossed H out. The torna nly 2 walls left	do reached a ighway 96 no lo moved no standing. 2 x was also blo	maximum inter orth of Mozier. rtheast up West 4 boards becam own off. 3 othe	A 2 car ga A 2 car ga Panther Cone missiles	with a dam rage was reek Hollo with sever	age path up to 100 yar destroyed, the porch of w where it reached Fa al driven into walls ar	destroyed and several windows were intensity. One home was destroyed into the ground. Half of the roof of butbuildings were also destroyed and
Calhoun County								
4 NNW Mozier to 5.5 NNE Mozier								Tornado (F1) neast along Belleview Hollow. An 80
	hit by		ornado also d					r in a row that this hog farm had been t another farm. Flying metal injured a
Pike County								
2 W Beecreek to .7 NE Pearl	11 The A	1412CST 1417CST nnada, MO tor	5.7 nado, which	70 crossed Calhou	0 n County, 1	0 IL, then co	200K ontinued northeast cro	Tornado (F1) ssing into southeast Pike County, IL
	was bl	own off causing	at least \$150	0,000 in damage	e. One home	e suffered		 Here, part of the roof of a company as destroyed and several outbuildings bout 300 feet away.
Greene County								
4 NNW Hillview to 4.6 NNW Hillview	11 The sa	1419CST 1421CST	1.4	50 the Whiteside	0 and Annao	0 da MO to	80K	Tornado (F1) her in northwest Greene County, IL
							l. Numerous trees wer	
Madison County								
St Jacob	11 Thund	1515CST erstorm wind gr	ısts damaged	some outbuildi	0 ngs near St	0 . Jacob.		Thunderstorm Wind (G55)
St. Clair County								
Mascoutah	11 Storm	1535CST spotters reporte	d trees down		0	0		Thunderstorm Wind (G55)
Marion County								
6 E Centralia to 6 E Central City	11 The sh	1645CST	orted trees do	wn east of Cent	0 ralia	0		Thunderstorm Wind (G55)
Marion County	1110 311	eim oinee repe	rica trees do	wir cust of cent	i aiia.			
Salem	11	1700CST			0	0		Thunderstorm Wind (G60)
Marion County								, ,
1 E Salem	11 Salem blown	~ .	nagement rep	ported trees dov	0 vn in town a	0 and just ea	st of town. The roof o	Thunderstorm Wind (G60) f the old train depot in town was also
St. Clair County								
O Fallon	27 Storm	1152CST spotters reporte	d 1 inch hail	in O'Fallon.	0	0		Hail (1.00)

		Time	Path	Path			Estimated Damage		Fe	bruary 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Pei Killed	rsons Injured	Dam: Property	age Crops	Character of Storm	•
ILLINOIS, Southwe			(2.2222)	(1323)				er op o		
Madison County	<u>.5t</u>									
1 NW Troy	27	1205CST	0.2	50	0	0			Tornado (F0)	
·		enforcement and					west of Troy	near the	intersection of I-270 ar	nd I-55/70. The
Madison County	tornad	lo was brief, fo	rmed in an op	en field and di	d no damag	e.				
Edwardsville	27	1215CST			0	0	200K		Hail (1.75)	
David do ville		all size hail dan	naged vehicles	and some roo	-		20011		11un (1.75)	
Bond County										
Pocahontas	27 Golfb	1237CST all size hail dam	nagad sama ya	hiclas in Docal	0 nontes	0	50K		Hail (1.75)	
Madison County	Gono	an size nan dan	iaged some ve	incles in 1 ocai	nontas.					
Highland	27	1245CST			0	0			Hail (1.00)	
	Storm	spotters reporte	ed 1 inch hail	in Highland.					. (,	
Fayette County										
Vandalia	27 Golfba	1254CST all size hail dam	naged a few ve	hicles in Vand	0 lalia.	0	50K		Hail (1.75)	
Clinton County										
St Rose	27 Amate	1300CST eur radio spotter	rs reported 1 in	nch hail.	0	0			Hail (1.00)	
Clinton County		1	•							
Trenton	27 The co	1305CST ounty sheriff rep	orted 1 inch l	nail	0	0			Hail (1.00)	
Bond County	1110 00	ounty sheriff rep	Jorted 1 men i	ш.						
Beaver Creek	27	1306CST eur radio spotter	rs raported 1 is	ach hail	0	0			Hail (1.00)	
Monroe County	Aman	eui radio spottei	.s reported 1 ii	iicii iiaii.						
3 W Waterloo	27	1310CST			0	0			Hail (1.00)	
Clinton Country	The co	ounty sheriff rep	oorted 1 inch l	nail just west o	f Waterloo.					
Clinton County Keyesport	27	1315CST			0	0			Hoil (1 00)	
ксусьрог		spotters reporte	ed 1 inch hail	in Keyesport.	U	V			Hail (1.00)	
Randolph County										
Sparta	27	1340CST			0	0			Hail (0.88)	
Randolph County										
Sparta	27 Storm	1340CST spotters reporte	ed nickel size	hail in Snarta	0 Wind ousts	0 also damac	10K red a utility s	hed	Thunderstorm W	ind (G52)
Marion County	Dioi iii	spouers report		m sparan	,, ma gusts	uiso duinag	sea a amin's			
Junction City	27	1400CST			0	0	40K		Thunderstorm W	ind (G55)
Marion County										
Sandoval	27 Thund	1400CST derstorm wind g	usts blew over	r 2 vacant mob	0 oile homes in	0 1 Junction (City. 1 inch h	nail was al	Hail (1.00) so reported in Sandova	al.
Marion County							•			
Salem	27	1410CST			0	0	100K		Hail (1.75)	
Marion County										
Salem		1410CST all size hail brol damage.	ke some windo	ows at a car de	0 alership in S	0 Salem. A fe	20K w mobile ho	mes at a r	Thunderstorm W nobile home park also	
Fayette County										
Farina	27 Storm	1415CST spotters reporte	ed 1 inch hail.		0	0			Hail (1.00)	
Marion County		•								
Kinmundy	27 A coo	1420CST perative observe	er reported 1 1	/4 inch hail ne	0 ear Kinmund	0 ly			Hail (1.25)	

Storm 1	Data a	and Un	usual W	eather	Phenomena
	vata t		usuai 🗤	Cather	1 IICHVIIICHA

		Time	Path	Path		ber of	Estimated	February 199			
Location		Local/ Standard	Length (Miles)	Width (Yards)	Per Killed	sons Injured	Damage Property Crops	Character of Storm			
NDIANA, Central											
INZ053>054- 061>062-067>068	Owen -	Morgan	- Greene - M	Ionroe - Kno	x - Davies	S					
	01 18	0000EST 0300EST			0	0		Flood			
	Flooding continued into the first week of February across southwestern parts of the White River. In addition, 1 to 2 inches of rain fell on the sixth of February causing additional flooding along the White River as far northeast as Centerton. Flooding of agricultural bottomland and county roads was most extensive from Elliston downstream.										
	The follo	wing are cr	ests and dates:								
	Elliston: Newberry Edwardsp Petersbur	FS - 14 gton: FS - 1 FS - 18 y: FS - 1 port: FS - 1 g: FS - 16	Feet; Crest - 8 Feet; Crest - 8 Feet; Crest - 3 Feet; Crest - 5 Feet; Crest - 6 Feet; Crest -	13.47 Feet on F 18.51 Feet on F 23.52 Feet on F 24.45 Feet on F 19.06 Feet on F 21.10 Feet on F 22.15 Feet on F	ebruary 09 February 10 ebruary 10 February 10 February 11 ebruary 13						
INZ028>029-035- 043>044-051-060- 067	Hazleton: Warren			22.30 Feet on F tain - Vermil	•	ke - Vigo	- Sullivan - Knox				
007	01	0000EST			0	0		Flood			
	_		•	-			ended due to heavy reational cabins were a	ains on February 6. Numerous roa lso effected.			
	The following are crests for various sites along the Wabash:										
	Lafayette Covingto Montezur Terre Har Riverton: Vincenne	n: FS - ma: FS - ute: FS - FS -	16 Feet; Crest 14 Feet; Crest 14 Feet; Crest 15 Feet; Crest	- 14.3 Feet on F - 19.0 Feet on I t - 21.2 Feet on - 19.28 Feet on - 19.47 Feet on est - 21.23 Feet	February 10 February 8 1 February 9 February 11	l					
INZ054	Morgar	1									
	07	0300EST 2300EST			0	0		Flood			
	heavy rai	ads had hig	h water as Wh	ite Lick Creek a	at Mooresvi	lle crested	at 17.49 feet (flood sta	age is 15 feet) on February 7 follows			
INZ037	Boone 07	0700EST			0	0		Flood			
		2300EST coding occu	urred along Eag	gle Creek at Zio	onsville. The	Crest was	at 7.98 feet (flood sta	ge is 7 feet) on February 07.			
INZ052	Clay 07	0700EST			0	0		Flood			
	•	2300EST ain caused		0	ands and co	ounty roads	s along the Eel River.	Bowling Green crested at 19.42 for			
INZ055	Johnson	_	,	•							
	07 09 Minor flo	0700EST 0300EST ooding occ		ngar Creek. The	0 e crest 2 mil	0 les northwe	est of Edinburg was a	Flood t 10.83 feet (flood stage is 9 feet)			
INZ045	February Putnam										
		0500505									

07 0700EST 0 0 0 Flood
08 1200EST

Minor flooding occurred on February 7 along Big Raccoon Creek and Big Walnut Creek. The crest was at Fincastle was 11.04 feet (flood stage is 11 feet) and Reelsville was 13.49 feet (flood stage is 12 feet).

		Time Path Path Number of		Estima	ited	February 1999			
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per Killed	sons Injured	Dama Property	ige Crops	Character of Storm
	Date	Standard	(Willes)	(Tarus)	Kilica	Injurca	Troperty	Сторз	
INDIANA, Central INZ045-053	Putns	am - Owen							
INZ043-033	07	0700EST			0	0			Flood
	08	0300EST							
INIZ042		-	rred along Mil	ll Creek at Cata	ract. The cre	est was 15.	87 feet (flood	stage is	10 feet) on February 8.
INZ042	Rand	-			0	0			171 - J
	U/	0700EST 1200EST			0	0			Flood
			U		0.64 feet (fl	ood stage i	is 10 feet) on	February	07. Minor flooding resulted.
INZ065-071>072			n - Jennings	5					
	07 11	0700EST 2300EST			0	0			Flood
	Minor	flooding occu						(flood sta	ge is 17 feet) on February 07, while
INT/050 051				et (flood stage is	s 16 feet) on	February	11.		
INZ070>071		ence - Jacks	son		•				771
	07 14	2300EST 0300EST			0	0			Flood
		inches of rain							ork of the White River. Many county
			_	al bottomland w t (flood stage is		•		/ feet (flo	ood stage is 12 feet) on February 08,
INZ047	Mari			. (
	08	0700EST			0	0			Flood
	Minom	1200EST	umad alama Eal	Il Cucale Millou	willo omosto.	1 at 7 52 fa	est (flood stope	o io 7 foot) on Fohmour 9
INZ044	Parke	-	irred along rai	ii Creek. Miller	sville crested	1 at 7.33 fe	et (11000 stag	e is / ieei) on February 8.
112011	11	1242EST			0	0			High Wind (G46)
		1244EST							
Formtoin Country	3 Tree	es were knocke	ed down near l	Rosedale. Spott	er's wind ins	struments r	recorded a gu	st of 53 m	ph.
Fountain County	11	1720ECT			0	0			Th J
Kingman	11	1730EST 1732EST			0	0			Thunderstorm Wind (G50)
Fountain County									
1 W Hillsboro	11	1749EST			0	0			Thunderstorm Wind (G50)
Vigo County		1751EST							
Countywide	11	1750EST			0	0			Thunderstorm Wind (G50)
county wide		2000EST			v	v			munucistorm vinu (320)
Parke County									
Marshall	11	1755EST 1757EST			0	0			Thunderstorm Wind (G50)
Vermillion County		1/5/E51							
Newport	11	1755EST			0	0			Thunderstorm Wind (G50)
•		1757EST							, ,
Shelby County									
5 W Shelbyville	11	2205EST 2207EST			0	0			Thunderstorm Wind (G50)
Brown County									
3 S Nashville	11	2206EST			0	0			Thunderstorm Wind (G50)
T		2208EST							
Decatur County		221 FEGE							TI 1 (050)
Greensburg	11	2215EST 2217EST			0	0			Thunderstorm Wind (G50)
	A squa		through centra	al Indiana knocl	king down n	umerous tr	ees.		
Lawrence County									
Bedford to Countywide	27	1745EST 1750EST			0	0	20K		Thunderstorm Wind (G60)
County with		1/30E31							

			Time	Path	Path	Numl	per of	Estimated	February 1999
Indiana County Speedway 27 1745ENT 0 0	Location	Date		_				_	G1
Specify Spec				(2-22222)	(= ===)			orehead, conf.	
Madison County Frankina	•								
Prinking	Speedway	27				0	0		Hail (1.00)
Note	Madison County								
NIZO45-053 Putamar	Frankton	27				0	0		Hail (1.00)
1						amage to a n	nobile ho	me and several build	ings in Lawrence County, while 1 inch
NDIANA, Northeast	INZ045-053	Putna	am - Owen						
NDIANA. Northeast		28				0	0		Flood
NZ003			flooding occu	rred along Mi	ll Creek at Cata	aract. The cre	st was 11	.61 feet (flood stage i	is 10 feet) on February 28.
	•	_							
A SEMI TRAILER WAS BLOWN OVER ON STATE ROAD 30 IN SOUTHERN LAPORTE COUNTY, SEVERAL TREES WERE REPORTED DOWNED IN MICHICIAN CITY SOUTHWEST WINDS GUSTING IN EXCESS OF 55 MPH WERE RECORDED ACROSS MUCH OF THE MIDWEST ARIBAD OF AN INTENSE COLD FRONT ON FEBRUARY 11TH. STRONG THUNDERSTORMS DEVELOPED ALONG AND AHEAD OF THE PRONT AS IT MOVED THROUGH ILLINOIS AND INDIANA. WINDS REMAINED HIGH IN THE WAKE OF THE PRONT DURING THE NIGHT OF FEBUARY 11TH AND IN THE EARLY MORNING HOURS OF FEBRUARY 2TH WITH OCCASIONAL GUSTS FROM THE WEST ABOVE 50 MPH. INDIANA. Northwest NONE REPORTED. NONE REPORTED.	INZ003							4	
WERE REPORTED DOWNED IN MICHIGAN CITY.				WAS BLOV	VN OVER ON				8
AHIALO DE AN INTENSE COLD FRONT ON FEBRUARY LITTL STRONG THUNDERSTORMS DEVELOPED ALONG NOW AND AHEAD OF THE FRONT AS IT MOVED THISROWS ALINSONS AND INDIANA. WINDS REMAINED HIGHIN IN THE WAKE OF THE FRONT DURING THE NIGHT OF FEBRUARY LITTH AND IN THE EARLY MORNING HOURS OF FEBRUARY 12TH WITH OCCASIONAL GUSTS FROM THE WEST ABVITH AND IN THE EARLY MORNING HOURS OF FEBRUARY 12TH WITH OCCASIONAL GUSTS FROM THE WEST ABVITH AND IN THE EARLY MORNING HOURS OF FEBRUARY 12TH WITH OCCASIONAL GUSTS FROM THE WEST ABVITH AND IN THE EARLY MORNING HOURS OF FEBRUARY 12TH WITH OCCASIONAL GUSTS FROM THE WEST ABVITH AND IN THE EARLY MORNING HOURS OF FEBRUARY 12TH WITH OCCASIONAL GUSTS FROM THE WEST ABVITH AND IN THE EARLY MORNING HOURS OF WEST ABVITH AND IN THE EARLY MORNING HEALTH AND IN THE EARLY MORNING HEALTH AND IN THE EARLY MORNING HEALTH AND IN THE E							AD 30 I	IV SOUTHERIV EA	ORTE COUNTY, SEVERAL TREES
AND AHE-AD OF THE FRONT AS IT MOVED THROUGH ILLINOIS AND INDIANA, WINDS REMAINED HIGH IN THE FRONT DURING THEN INGHIT OF FEBULARY 11TH AND IN THE EARLY MORNING HOURS OF FEBRUARY 12TH WITH OCCASIONAL GUSTS FROM THE WEST ABOVE 50 MPH. NONE REPORTED.									
MAKE OF THE FRONT DURING THE NIGHT OF FEBUJARY 11TH AND IN THE EARLY MORNING HOURS OF FEBRUJARY 12TH WITH OCCASIONAL GUSTS FROM THE WEST ABOVE 50 MPH. INDIANA, Northwest									
NDIANA, Northwest									
NONE REPORTED. NONE REPORTED. NONE REPORTED. NONE REPORTED. NONE REPORTED.			UARY 12TH	WITH OCCA	SIONAL GUS	TS FROM T	HE WES	Γ ABOVE 50 MPH.	
INZO77-079-091	INDIANA, Northwes	<u>st</u>							
INZO77-079-091									
INZ077-079-091 Washington - Jefferson - Floyd 07 132SEST	INDIANA Couth Co		E REPORTED).					
1345EST 0 0 1 1K			ington Iof	forcon Ele	w.d				
1345EST	1NZU//-U/9-U91		_	ierson - Fic	oya	0	0	117	High Wind (C50)
Crawford County Countywide 11 2347EST 0 0 0 Thunderstorm Wind (G50) Trees down countywide Orange County Paoli 11 2357EST 0 0 0 Thunderstorm Wind (G50) Fower pole down Scott County Scott Sourty Jasper 27 1650EST 0 0 0 Thunderstorm Wind (G50) One inch hail fell in Jasper Orange County French Lick 27 1710EST 0 0 0 Hail (0.75) Dubois County Dubois County French Lick 27 1715EST 0 0 0 Hail (1.00) Orange County Dubois County Trees down east of Scottsburg Orange County French Lick 27 1710EST 0 0 0 Hail (0.75) Dime size hail fell in French Lick Dubois County Orange County Dubois County Dubois County Dubois County Trees down east of Scottsburg 0 0 0 Hail (1.00) Orange County French Lick 27 1710EST 0 0 0 Hail (0.75) Dime size hail fell in French Lick Dubois County Orange County Dubois County Dubois 27 1715EST 0 0 0 Hail (1.00) Orange County Paoli 27 172EST 0 Hail (0.00) Hail (1.00) Orange County Paoli 27 172EST 0 Hail (0.00) Hail (1.00)		07				U	U	IK	High Wind (G50)
Crawford County									50 1
Crawford County Countywide			ng area of low	v pressure mo	ved across the	Ohio Valley	bringing	winds gusting to ove	er 50 mph at many locations across the
Countywide		urcu.							
Trees down countywide Corange County	Crawford County								
Orange County Paoli 11	Countywide					0	0		Thunderstorm Wind (G50)
Paoli	0 0 1	Trees	down countyw	vide					
Power pole down Scott County Scott Surg 12									
Scott County 12 0002EST 0 0 0 Thunderstorm Wind (G50)	Paoli					0	0		Thunderstorm Wind (G50)
12 0002EST 0 0 Thunderstorm Wind (G50)	Scott County	Tower	poie down						
Dubois County				5 1		0	0		Thunderstorm Wind (G50)
Jasper 27 1650EST One inch hail fell in Jasper 0 0 Hail (1.00) Orange County French Lick 27 1710EST Dime size hail fell in French Lick 0 0 Hail (0.75) Dubois County Under Size hail fell in northeast part of county 0 0 Hail (1.00) Orange County Orange County Hail (1.00) Paoli 27 1720EST 0 0 Hail (1.00)	Duboic County	Trees	down east of S	scottsburg					
One inch hail fell in Jasper Orange County French Lick 27 1710EST		27	16 5 0ECT			Λ	0		Hail (1 00)
French Lick 27 1710EST Dime size hail fell in French Lick 0 0 Hail (0.75) Dubois County Dubois 27 1715EST Quarter size hail fell in northeast part of county 0 0 Hail (1.00) Orange County Paoli 27 1720EST 0 0 Hail (1.00)	Jasper			Jasper		U	U		пан (1.00)
Dime size hail fell in French Lick	Orange County								
Dubois 27 1715EST Quarter size hail fell in northeast part of county 0 0 Hail (1.00) Orange County Paoli 27 1720EST 0 0 Hail (1.00)	French Lick			n French Lick		0	0		Hail (0.75)
Dubois 27 1715EST Quarter size hail fell in northeast part of county 0 0 Hail (1.00) Orange County Paoli 27 1720EST 0 0 Hail (1.00)	Dubois County								
Orange County Paoli 27 1720EST 0 0 Hail (1.00)				in northeast	part of county	0	0		Hail (1.00)
Paoli 27 1720EST 0 0 Hail (1.00)	Orange County	,			,				
	= -	27	1720EST			0	0		Hail (1.00)
		One in	nch hail fell in	Paoli					• •

			Estima		February 1999					
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per Killed	sons Injured	Dama Property	ige Crops	Character of Storm	•
INDIANA, South Cer			()	(,		J	T			
Orange County	<u>111 a1</u>									
Countywide	27	1804EST			0	0			Thunderstorm Wind (G 5 0)
	A storag	ge building w			i, a shelter h		damaged in P	aoli, and	telephone lines were down	,
Washington County	Paoli. T	rees and pow	er lines were	down countyw	ride.					
Washington County Salem	27	1830EST			0	0			Thundarstorm Wind (750)
Salem	Trees do				U	U			Thunderstorm Wind (330)
Washington County										
Campbellsburg	27	1840EST			0	0			Hail (1.00)	
Harrison County	One inc	h hail fell in (Cambellsburg							
Laconia	27	1847EST			0	0			Heil (1.75)	
Lacoma			inch hail fell	in Laconia	U	U			Hail (1.75)	
INDIANA, Southeast		•								
Franklin County										
3 SE Brookville	11	2215EST 2230EST			0	0	3K		Thunderstorm Wind (G 50)
	Trees ki	nocked down.								
Union County										
Clifton	11	2250EST 2255EST			0	0	10K		Thunderstorm Wind (G60)
INDIANA, Southwest		damaged a re	sidence and a	shed, and know	cked down ti	rees.				
INZ085-087>088		· Warrick -	Spencer							
112005-007/000	01	0001CST	Spencer		0	0			Flood	
	06 The Ohi	1000CST to River, whi			fell below f	lood stage			Newburgh during the first mlands and some riverside	
INZ081-085	Gibson	- Posey								
	01	0001CST			0	0	8K		Flood	
				-		-		Harmony -	on February 15. Flood stag	e at New
IN/7001		-	nd the crest of	f 18.21 feet pro	oduced only	minor floo	ding.			
INZ081	Gibson					0	217		Tal 1	
	01 04	0001CST 1800CST			0	0	3K		Flood	
				_	•			_	ebruary 1 at Princeton. The	e crest at
INZ081>082-		-		erburgh - W			suitea in mino	or Hoodin	g of low-lying areas.	
085>088	07	0220CCT			0	0			Ctuona Winda	
	07	0330CST 0600CST			0	0			Strong Winds	
	_		f an approach at blew down.		gusted to bet	ween 50 a	nd 55 MPH a	t times. T	here were some tree limbs a	and a few
Pike County										
Arthur	11 Ti 1	1930CST	. 1 . 50 .	MDII	0	0			Thunderstorm Wind (G 50)
Warrick County	I hunde	rstorm winds	gusted to 58 l	MPH.						
Warrick County Lynnville to	11	1944CST			0	0			Thunderstorm Wind (352)
Boonville	11	1777031			v	v			inunucistoriii vvillu (<i>334)</i>
	A televi	sion station re	elayed a repor	t of measured	wind gusts to	62 MPH	at Boonville	and 60 M	PH at Lynnville.	

		Time Local/	Path Length	ength Width		Number of Persons		ated age	February 1999	
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	
INDIANA, Southwo	est .									
Spencer County										
Richland to 3 NE Richland	11	2012CST 2015CST			0	0	40K		Thunderstorm Wind (G75)	
	Two barns were destroyed, one in Richland City and the other 3 miles northeast of Richland City. A gr there was sign damage at a co-op in town. A small block building was blown apart. The roof was Numerous trees were snapped or uprooted. All debris was blown in a northeast direction.									
Spencer County				•						
1.5 NE Richland	11 A mic	2012CST	ame area can	sed significant	0 damage	0			Hail (1.00)	

Poseyville Vanderburgh

County

Posey County

3 W Evansville to 3 E Evansville

27

1545CST

A trailer was blown over, and a barn was blown down.

27 1558CST 0 0 200K Thunderstorm Wind (G75)

Numerous trees and power lines were down in and around Evansville. Wind speeds were measured to 75 MPH at a television station in Evansville. A few microbursts with estimated wind speeds between 80 and 90 MPH occurred in and near Evansville. Two of the most intense microbursts were on the northwest side of Evansville and the east side of Evansville. On the northwest side, shingles were off roofs, some 2 by 4's were blown through a car windshield, and large storage buildings were damaged. This damage path was 1 to 2 miles long and 300 yards wide. Elsewhere in the county, in the McCutchanville area, large doors of a building were shoved in. About 3 miles north of Daylight on Interstate 164, a tractor trailer was overturned.

50K

Thunderstorm Wind

Just east of Evansville, near the junction of Interstate 164 and Route 62, two power poles were downed, and three houses sustained significant roof damage. A light commercial structure that was under construction was blown down.

Warrick County

Newburgh to 2 N Newburgh

27 1622CST 0 0 50K Thunderstorm Wind

Thunderstorm winds damaged at least two businesses in Newburgh. Power poles were snapped along Route 261.

IOWA, Central

IAZ004>007-015>017-023>028-033>039-044>050-057>062-070>074-081>084-092>095 Emmet - Kossuth - Winnebago - Worth - Palo Alto - Hancock - Cerro Gordo - Pocahontas - Humboldt - Wright - Franklin - Butler - Bremer - Sac - Calhoun - Webster - Hamilton - Hardin - Grundy - Black Hawk - Crawford - Carroll - Greene - Boone - Story - Marshall - Tama - Audubon - Guthrie - Dallas - Polk - Jasper - Poweshiek - Cass - Adair - Madison - Warren - Marion - Adams - Union - Clarke - Lucas - Taylor - Ringgold - Decatur - Wayne

11 0900CST 0 0 230K Ice Storm 1400CST

A very vigorous storm system moved through the central U.S. during the morning of the 11th. Very warm and moist air was drawn north ahead of the system with record high temperatures in the 60s reported. Dew point temperatures soared into the mid to upper 50s as well. A wide variety of weather was associated with the storm. Thunderstorms were reported over much of the state, with significant storms including hail over the southeast third of Iowa. The problem was that in the wake of the surface low pressure system, a cold front passed through the state. Temperatures fell as much as 20 to 30 degrees in an hour or so after the frontal passage. Much of the state fell to freezing or below by daybreak on the 11th. The thunderstorms then moved over sub-freezing air to produce freezing rain. Further to the northwest there were no thunderstorms, however rain fell into areas where the surface temperature had fallen into the upper 20s. Travel was hazardous with some areas receiving over one quarter inch of ice. Significant ice accretion occurred over parts of northwest Iowa. In the Graettinger area of Palo Alto County, ice accumulated on trees which fell taking out power in the area for 7 hours. Most locations received little more than a tenth inch of ice cover however. There was some minor damage to trees around the area due to the wind and ice loading, but the most significant problem was with icy travel. Spotty power outages were also reported due to "galloping transmission lines", which is caused by ice accretion changing the aerodynamics of the lines such that they form an air foil in the wind. During the afternoon hours it became cold enough to change the freezing rain to snow. A band of snow moved across the state. The snow combined with winds of 30 to 40 MPH produced blizzard conditions for a brief period as the band moved through. Several roads were closed including Interstate 35 north of U.S. Highway 30 and Iowa State Highway 44 in Dallas County. The band of near zero visibility only lasted one to two hours and conditions improved rapidly during the evening. Many schools across the state closed early during the afternoon of the 11th, and most events across the state were cancelled that evening. There were hundreds of accidents reported across the state due to the icy roads. Rush hour traffic was a major problem in the larger cities such as Des Moines. The ice lingered into the next day, but at least the visibility had improved.

		Time	Path	Path Path		Number of		ated	February 1999	
		Local/	Length	Width	Pers	sons	Dam	age		
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

IOWA, Central

IAZ033>034-044>046-057>059-070>072-081>083-092>094 Sac - Calhoun - Crawford - Carroll - Greene - Audubon - Guthrie - Dallas - Cass - Adair - Madison - Adams - Union - Clarke - Taylor - Ringgold - Decatur

Winter Storm

22 1000CST 0 0 85K 2000CST

A winter storm swept into Iowa on the morning of the 22nd, and continued through the day into the early evening hours. The storm system was not a classic storm system by any means. The system was totally devoid of moisture from the Gulf of Mexico. Satellite pictures indicated a tropical plume of moisture sweeping into the storm, however surface and upper air observations indicated no feed of moisture in the low levels. The storm system was very dynamic, producing height falls of nearly 300 meters at 300 mbs, and over 150 meters at 500 mb. It was quite compact as well. The surface system was well defined, however the entire system weakened as it moved southeast. Starting in the northern Rockies, the surface low moved southeast across western Nebraska, through northeast Kansas, then across Missouri into the southern tip of Illinois. A large area of snow occurred north and east of the low pressure track. Heavy snowfall occurred in a relatively narrow area, with the snow intensity dropping off rapidly northeast of the heavy snow track. The heaviest snow fall over southwest Iowa, however heavy snow fall southwest of a Rockwell City, Dallas Center, to Lamoni line. Some of the heavier snowfall totals from the storm included Winterset with 7.5 inches, Creston, Lamoni, Mt. Ayr, Audubon, Greenfield and Guthrie Center with 8.0 inches, and Carroll and Glidden with 9.0 inches of new snow. Eight to nine inches of snow was reported over much of the west half of Guthrie County. Winds were a problem with the system due to the fluffy consistency of the snow. Southeast to east winds of 15 to 25 MPH and gusty were common during the storm, which caused considerable drifting of snow and some blowing snow. A few areas reported wind gusts over 35 MPH. Audubon for example had a wind gust of 36 MPH. Visibility was reduced to between 1/4 and 1/2 mile over the southwest third of Iowa for several hours. The Iowa D.O.T. was recommending no travel into the area for a few hours. The main problem was with icy roads. A period of warm weather had preceded the snowfall, thus the snow stuck to the roads and froze as the snowfall became heavier. There were numerous accidents through much of the southwest half of the state. Many schools and some activities were cut short or cancelled due to the ice. There were no major problems with the storm however.

Calhoun County

5 SW Lake City

26 0840CST 0 0 0.50K Hail (1.00)

A strong warm advection pattern was in place over Iowa during the early morning of the 26th. Elevated thunderstorms developed over western Iowa and moved northeast quickly. With the atmosphere being relatively cold from the winter season, many of the storms produced hail with ease. One inch diameter hail fell southwest of Lake City as the storm moved overhead.

Jasper County

Galesburg

26 2245CST 0 0 1K Urban/Sml Stream Fld 27 0130CST

The same storm system that produced severe weather in the morning advanced east during the day. Though no severe weather occurred during the evening, moisture had increased significantly by the evening hours as dew point temperatures reached 60 degrees just south of Iowa. This moist air was lifted along a weak cold front advancing across the state and thunderstorms developed over parts of central and southeast Iowa. Rainfall was heavy for late February. One to two inches of rain fell in under two hours over the south third of Jasper County. This caused urban flooding as the soil was quite moist from recent snow melt. The flooding was not a major problem, but considerable ponding was reported on roadways.

IOWA, East Central and Southeast

Van Buren County						
9 N Bonaparte	11	1125CST	0	0	0.20K	Thunderstorm Wind
Henry County						
3 E Hillsboro	11	1130CST	0	0	25K	Thunderstorm Wind
Henry County						
Mt Pleasant	11	1130CST	0	0	5K	Thunderstorm Wind
		1200CST				
Lee County						
4 W Montrose	11	1150CST	0	1		Thunderstorm Wind (G52)
Louisa County						
Countywide	11	1200CST	0	0		Thunderstorm Wind (G55)
		1225CST				
Jones County						
1.5 S Olin	11	1204CST	0	0		Thunderstorm Wind (G50)
Dubuque County						
Dubuque	11	1216CST	0	0		Hail (0.80)

	Time Local/				ber of sons	Estim Dam		February 1999
Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm
l and S	<u>outheast</u>							
11	1220CST 1222CST			0	2	20K		Thunderstorm Wind (G63)
11	1220CST			0	0	20K		Thunderstorm Wind (G60)
11	1221CST 1231CST			0	0	9K		Thunderstorm Wind (G63)
11	1230CST			0	0	2K		Thunderstorm Wind
11	1230CST 1240CST			0	0	20K		Thunderstorm Wind
11	1230CST			0	0	7K		Thunderstorm Wind
11	1240CST 1250CST			0	0	0.20K		Thunderstorm Wind
11	1250CST			0	0	0.50K		Thunderstorm Wind
11	1250CST 1300CST			0	0	5K		Thunderstorm Wind
	11	Date Local/ Standard 1 and Southeast 11 1220CST 1222CST 11 1220CST 11 1221CST 1231CST 11 1230CST 11 1230CST 11 1230CST 11 1230CST 11 1250CST 11 1250CST 11 1250CST 11 1250CST 11 1250CST 11 1250CST	Local	Local/ Standard Length (Miles) Width (Yards)	Local/ Standard Length (Miles) Width (Yards) Killed	Local/ Standard Length (Miles) Width (Yards) Rilled Injured	Local Local Standard Miles Width Persons Dam Property	Local/ Standard Composite Composite

An intensifying squall line ahead of a strong cold front sent severe thunderstorms racing across Eastern Iowa and Northwest Illinois. Widespread damage from high winds and hail was reported across Southeast Iowa into Northwest Illinois as the storms moved northeast. In Eastern Iowa high profile vehicles were overturned by the strong winds, and many downed trees, damaged homes, and farm buildings were reported. Two people were injured in Louisa county when the motor home in which they were riding was swept off the road and blown into a ditch, and in Lee county a man sustained injuries when the semi he was driving was blown over. In Muscatine strong winds tore a portion of roof off an office furniture plant and sent it crashing into an employee parking lot causing damage to numerous cars. And at a home in Dixon, fire fighters from four towns were called to extinguish a lightning-caused fire.

IOWA, Northeast

018>019

Mitchell - Howard - Floyd - Chickasaw

11 1500CST 0 1 60K Winter Storm 2030CST

Morning rain showers and even some thunder and lightning gave way to a mix of freezing rain, snow and sleet, which changed to all snow by afternoon. Although snow amounts only totaled 1 to 3 inches, strong north winds with gusts to 50 mph caused whiteout conditions. A truck driver was injured slightly when a sudden burst of wind toppled his semi into a ditch near Riceville (Howard County).

IOWA, Northwest IAZ020>021-

1AZ020>021 031>032

Plymouth - Cherokee - Woodbury - Ida

22 0700CST 0 0 Heavy Snow 2300CST

Snowfall of 6 to 10 inches slowed transportation. The snow also forced schools and some businesses to close early.

IOWA, Southwest

IAZ043-055>056-069

Monona - Harrison - Shelby - Pottawattamie

High wind and snow brought winter weather abruptly back to residents of western Iowa a day after record setting highs in the 70s were observed. A sustained northwest wind of 35 to 40 mph and gusts over 50 mph was accompanied by snowfall of 1 to 3 inches. This created near whiteout conditions for a while across the region.

		J								
		Time Local/	Path Length	Path Width	Number of Persons	f	Estima Dama]	February 1999
Location	Date	Standard	(Miles)	(Varde)	Killed Ini	inred F	Property	Crops	Character of Storm	

IOWA, Southwest

IAZ056-069 Shelby - Pottawattamie

2100CST

0755CST

1050CST

Freezing drizzle and sleet changed over to snow and quickly became heavy across parts of western Iowa during the late morning of 2/18/99. Snowfall of 6 inches was observed in a band over most of Pottawattamie and Shelby counties.

IAZ043-055>056-069-079>080-090>091 Monona - Harrison - Shelby - Pottawattamie - Mills - Montgomery - Fremont - Page

22 0500CST 0 0 Winter Storm

A winter storm dropped 8 to 10 inches of snow across almost all of western Iowa with like amounts across eastern Nebraska. The snow was accompanied by an east to southeast wind of 15 to 30 mph which caused some blowing and drifting of the snow. The snow caused cancellations of classes at many schools either Monday morning or afternoon (02/22/99) as well as Tuesday. Heavier snow amounts in western Iowa included...10 inches at Shenandoah, Logan and Little Sioux and 9 inches at Red Oak, Oakland, Glenwood and Sidney.

KANSAS, East

Shawnee County

Topeka 11 0550CST 0 0 Lightning

Lightning struck a power line and knocked out power to about 1300 KPL customers for several hours.

Douglas County Lawrence

Lawrence 11 0754CST 0 0 Hail (0.75) Anderson County

Garnett
Anderson County

Garnett 11 0756CST 0 0 Hail (1.00)

City. The driver of the car was killed at the scene of the accident. M60VE

KSZ010-024 Marshall - Jackson

11

1335CST
Strong winds produced blowing snow that caused poor visibility and resulted in a car and semi-trailer accident 2 miles east of Home

0

Hail (0.75)

High Wind (G40)

KSZ008>012-022>024-026-038>040-056 Republic - Washington - Marshall - Nemaha - Brown - Riley - Pottawatomie - Jackson - Jefferson -

Wabaunsee - Shawnee - Douglas - Franklin

22 0500CST 0 0 Winter Storm

23 0200CST

Anywhere from 2 to as much as 6 inches of snow fell across northeast and part of east central Kansas. The snow was accompanied by strong winds which produced considerable blowing and drifting snow along with poor visibilities. A number of traffic accidents resulted from the storm and produced numerous minor injuries.

KANSAS, Extreme Southeast

NONE REPORTED.

KANSAS, North Central

NONE REPORTED.

KANSAS, Northeast

NONE REPORTED.

KANSAS, Northwest

KSZ002-013 Rawlins - Sherman

11 0600CST 0 2 High Wind (G50)

12 0400CST

High winds blew down a large Cottonwood Tree and blew out a few house windows in Atwood. The high winds also jacknifed a truck on Interstate 70 near Goodland and injured 2 people in the truck as the trailer flipped over a bridge.

	Sto	orm Da	ta and	l Unusı	ıal We	eathe	r Phenomo	ena
		Time	Path	Path	Numl		Estimated	February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Pers Killed	sons Injured	Damage Property Crops	Character of Storm
KANSAS, Southeast Greenwood County						-		
5 SE Eureka KANSAS, Southwest	11	0626CST			0	0		Thunderstorm Wind (G52)
		E REPORTED.						
KENTUCKY, Centra KYZ030-033>035- 041	_	rson - Henry	- Shelby -	Franklin - F	ayette			
	07	1325EST 1405EST			0	0	14K	High Wind (G45)
		damage at radio				ringing wi	nds in excess of 50 mp	oh in many locations.
Logan County								
5 S Russellville	11 Roof b	2224EST olown off home	in southern	Logan county	0	0	5K	Thunderstorm Wind
Meade County				,				
6 S Brandenburg	27 Two to	1842EST railers were des	stroyed, and 4	were damaged	0 I. Trees and	3 power line	30K es downed.	Thunderstorm Wind
Jefferson County								
Shively	27 Roof o	1910EST damage			0	0	5K	Thunderstorm Wind
Bullitt County								
Mt Washington	27 Dime	1920EST size hail fell			0	0		Hail (0.75)
Hart County								
10 NE Munfordville	27 Traile	1920EST r damaged in no	ortheastern H	art county	0	0	2K	Thunderstorm Wind
Spencer County								
Elk Creek	27 Trees	1940EST downed			0	0		Thunderstorm Wind (G50)
KENTUCKY, Easter	<u>'n</u>							
		E REPORTED.						
KENTUCKY, North		G4	D1 T					
KYZ101>103-105	Green 11	nup - Carter	- Boyd - L	awrence	0	0		Record Warmth
	Aftern	1700EST oon temperatur	es soared we	ll into the 70s.	Grayson and	l Ashland l	ooth observed 78 degre	ees.
KYZ101>103-105		nup - Carter			Ĭ		2	
	12	1000EST 1400EST			0	0		Snow
KENTUCKY, North		ian 24 nours ar	ter temperatu	res in the 70s,	to 3 inches	or snow re	il in the wake of a stro	ong cold frontal passage.
	NONI	E REPORTED.						
KENTUCKY, South		Z KLI OKTLD.						
KYZ004>005-007- 010-014-018		rd - Mccrack	ken - Livinş	gston - Critte	enden - Uni	ion - Hen	nderson	
-	01 08	0001CST 1200CST			0	0	12K	Flood

The Ohio River, which rose above flood stage in mid to late January, crested on February 1 at Uniontown and Paducah. The crest at Paducah was 44.23 feet, which is over 5 feet above flood stage. The crest at Uniontown (J.T. Meyers Lock and Dam) was 43.85

		Time Local/	Path Length	Path Width		ber of sons	Estimated Damage	February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property Crops	Character of Storm
KENTUCKY, South	west							
KYZ020	feet, al	ected towns ex						e height of the flood, several small ined to agricultural bottomlands and
1112020	01	0001CST			0	0		Flood
	02	2000CST	ch crested at	Calhoun in late			ood stage on February	
Graves County								
3 S Dublin	07 A sma	0200CST ll tool barn was	s destroyed.	Elsewhere in the	0 e county, nu	0 merous tree	30K es were blown down a	Thunderstorm Wind (G52) and a mobile home was overturned.
Carlisle County								
Milburn				own. Wind gust and 70 MPH oc				Thunderstorm Wind (G55) to 55 MPH outside of thunderstorms.
KYZ001>011- 013>016-018>021							- Livingston - Mar Daviess - Mclean -	shall - Calloway - Crittenden - Muhlenberg
	07	0255CST		•	0	0	40K	Strong Winds
	scattere of Pad kitcher Isolate	ed tree limbs an ucah in the Fan and both bedr d higher damag	nd a few rotter rley section rooms. A few ging wind gu	red or older tree of McCracken power outages	s. Near Padu County, a 1: occurred ac 'H were asso	icah, a tree 50-foot oak ross wester	fell on a business, cau tree crashed onto a l n Kentucky, mainly ir	we hours. These winds brought down using considerable damage. Just south nouse, falling through the roof of the a conjunction with downed tree limbs. mated observing sites at Paducah and
Marshall County								
Calvert City		outside of thus						Thunderstorm Wind (G56) . Trees and signs were down. General aced higher gusts between 60 and 65
Muhlenberg County								
Beech Creek	11 High t	2030CST hunderstorm w	rinds estimat	ed near 60 MPF	0 I downed a l	0 arge tree.		Thunderstorm Wind (G52)
Todd County								
Elkton	11	2034CST			0	0		Thunderstorm Wind (G52)
Union County .5 E Morganfield to	27	1600CST	3	100	0	2	200K	Tornado (F1)
3 NE Morganfield	Three buildir	1605CST mobile homes	in a mobile l oyed. Two o	nome park were	destroyed, a	and 3 others	s received major dama	ge. Several garages and small storage cuts, bruises, and torn ligaments. Top
LOUISIANA, Northe	<u>east</u>							
St Joseph	09	1230CST 1400CST	<i>a</i>		0	0		Flash Flood
Catahoula Parish	Severa	ıl cıty streets w	ere flooded.	Yards were floo	oded with wa	ater approa	ching several homes a	nd businesses.
Harrisonburg	09	1645CST			0	0		Hail (0.75)
Catahoula Parish		10.0001			v	Ū		11un (0170)
Countywide	27 Severa	1615CST al trees were blo	own down th	aroughout the Pa	0 arish.	0	2K	Thunderstorm Wind
Concordia Parish								
Monterey	27 Severa	1630CST al trees and pow	ver lines wer	e blown down.	0	0	5K	Thunderstorm Wind

		Time	Path	Path		ber of	Estimated		February 1999	
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per Killed	sons Injured	Dam Property	age Crops	Character of Storm	
LOUISIANA, North	west									
De Soto Parish										
Stonewall Bossier Parish	27	1310CST			0	0			Hail (0.75)	
Bossier City Caddo Parish	27	1410CST			0	0			Hail (1.00)	
Shreveport Red River Parish	27	1410CST			0	0			Hail (0.88)	
Coushatta Caddo Parish	27	1415CST			0	0			Hail (0.75)	
1 W Blanchard Caddo Parish	27	1435CST			0	0			Hail (0.88)	
2 N Shreveport Caddo Parish	27	1435CST			0	0			Hail (0.88)	
Shreveport Bossier Parish	27	1500CST			0	0			Hail (1.00)	
Benton Natchitoches Parish	27	1535CST			0	0			Hail (1.00)	
Natchitoches Bossier Parish	27	1745CST			0	0			Hail (0.75)	
Benton	27	1533CST 1539CST			0	0			Hail (1.00)	
LOUISIANA, South St. Tammany Parish	<u>east</u>	1337C31								
Slidell	27 Dime	1830CST sized hail was	reported in se	veral locations	0 between Bay	0 you Liberty	y and Oak H	arbour.	Hail (0.75)	
St. Charles Parish										
Norco	tornac roofs	do destroyed 3 of 29 different	mobile home structures in	es and heavily n the area. The	damaged 2 lere was mod	buildings. lerate to h	In addition, eavy damage	the tornace to a roc	Tornado (F1) ng and 25 to 50 yards wide path. The lo produced mostly minor damage to of and wall on the second floor of a veyed by NWS Meteorologist.	
LOUISIANA, South		ory upurument	ounuing unu		ge to un elen		ioon Duning	, was sur	eyed by Tiving Hactoriologisti	
LAZ027-030	Vern	on - Beaureg	gard							
	the Lo were a damag	ouisiana side of also significant	the river, hun ly impacted. cople were fo	dreds of acres Over 30 home orced to evacua	of farmland s in Vernon te. Dozens o	were wash Parish and of roads in	ed away, as v d another 30	well as a d	Flood od levels since May and July 1989. On lozen cattle. Woodlands near the river in Beauregard Parish received serious amaged from high water, causing the	
Vernon Parish										
Leesville	27 Trees	1530CST were downed in	n Leesville.		0	0	10K		Thunderstorm Wind	
Rapides Parish 5 SW Alexandria	27	1540CST			0	0			Hail (0.75)	
Rapides Parish										
7 SE Alexandria Rapides Parish	27	1610CST			0	0			Hail (0.75)	
15 SE Alexandria Beauregard Parish	27	1610CST			0	0			Hail (0.75)	
2 N Ragley	27 Trees	1610CST blown down.			0	0	10K		Thunderstorm Wind	

		Time Path Path Local/ Length Width			Number of Persons		Estimated Damage			February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	
LOUISIANA, South	west									
Allen Parish	W CBC									
2 W Kinder	27	1637CST			0	0	50K		Thunderstorm	Wind
		oile home was r			ring a severe		orm. Several	trees were	e also blown down.	
Calarda Dadah	at the	time, so there w	ere no injuri	es.						
Calcasieu Parish	27	1049CCT			0	0			H 3 (0.55)	
15 N Sulphur Calcasieu Parish	27	1948CST			0	0			Hail (0.75)	
Lake Charles	27	2030CST			0	0			Hail (1.00)	
Lafayette Parish	21	2030C51			v	v			Han (1.00)	
8 SW Lafayette	27	2120CST			0	0			Hail (0.75)	
MAINE, North					-	-			(****)	
· · · · · · · · · · · · · · · · · · ·										
	NON	E REPORTED.								
MAINE, South										
MADELLAND CO.		RECEIVED.								
MARYLAND, Centr	<u>al</u>									
Montgomery County		4=00=0=								
Wheaton	12 Unoco	1700EST cupied elementa	rv school los	at its roof	0	0	10K		Thunderstorm	Wind
Charles County	Chock	capica cicinciia	ny senoor io	113 1001						
Pisgah	12	1705EST			0	0	0.50K		Thunderstorm	Wind
-	Tree o	downed in area	of Stuckey L	ane and Poorho	use Road					
Howard County										
3 NE Columbia	12	1715EST	•	,	0	0	4K		Thunderstorm	Wind
Charles County	1 wo t	rees downed, tv	vo cars dama	iged						
5 W Waldorf	12	1720EST			0	0	5K		Lightning	
3 W Waluuff		ning struck tree	and pole star	rting fire, wire	-			ind connec	Lightning etors	
Charles County			•		Ç.	C				
Welcome	12	1730EST			0	0	0.50K		Thunderstorm	Wind
	Tree o	downed across I	Route 6 Wes	and Mill Swar	np Road					
Charles County										
La Plata	12	1744EST	amazatian of	Chimin a Willow	0 Way and W	0 Zaahin atau	1K		Thunderstorm	Wind
		downed onto int		-	-	_		mpanied h	y thunderstorms wi	ith damaging wind
		0		0	_				on County recorded	0 0
	MPH	as thunderstorm	s moved thr	ough around 4:	15 pm. The	strong wir	nd accompan	ying the s	torms was blamed	for damaged to an
		-	•		•	-			Street in Wheaton	
			-				-		a in Howard Count off of Route 108.	•
		-							t 3 miles north of C	
	trees v	vere knocked de	own by the tl	nunderstorms a	s they move	d through (Charles Cour	nty. A wir	nd anemometer on t	the Potomac River
	_		•	_					ne waters on the Po	
							-		ar Leesylvania Parl ss Route 6 West at	
	_					-	-		Avenue in La Plat	_
	the sto	orm also struck	a tree and po	wer pole on Ro	ute 228 near	Briarwood	d, starting a f	fire and re	sulting in arched an	nd downed wires in
		cinity. In additi		nemometer at T	all Timbers	in St. Mar	y's County n	neasured a	wind gust of 57 M	IPH at 6:14 pm as

0 0

Drought

the storms passed through.

0000EST

2359EST

01

28

Cecil - Kent - Queen Annes - Talbot - Caroline

MARYLAND, Northeast MDZ008-012-015- Ced

019>020

		Time Path Path Local/ Length Width		Numi Pers		Estimated Damage		February 199	
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm
MARYLAND, North	On a c	wiest precipita	ition falling in	Cecil County	and lighter a	mounts far	ther south. F	recipitat	ged between 2.2 and 2.8 inches with ion totals were between 70 and 1009 ls. However, additional precipitation
	was sti	ll needed to o	vercome longe		nortages as g	round wat			low normal in most parts of the state
MARYLAND, South Worcester County					Ţ				
Ocean City	12 Wind	2005EST gust to 60 mpl	n reported at P	ublic Safety Bu	0 ilding.	0			Thunderstorm Wind (G52)
MARYLAND, West		, I			. <i>G</i> .				
		E REPORTED							
MASSACHUSETTS Bristol County	<u>, Centi</u>	ral and Eas	<u>st</u>						
Taunton	02 03	1500EST 0300EST			0	0			Heavy Rain
Essex County									
Gloucester	02 03	1500EST 0300EST			0	0			Heavy Rain
Norfolk County									
Milton	02 03	1500EST 0300EST			0	0			Heavy Rain
Plymouth County									
Plymouth	02 03	1500EST 0300EST			0	0			Heavy Rain
Worcester County									
Milford	02 03	1500EST 0300EST			0	0			Heavy Rain
MAZ013>024									Bristol - Western Plymouth - es - Nantucket
	02 03	1800EST 0300EST			0	0			Strong Winds
MAZ017	North	nern Bristol							

Taunton (spotter) A strong low pressure system moved from the Carolinas to southern New England, bringing strong southeast winds and over two inches of rain to eastern Massachusetts. The highest gust reported was 66 mph, by a spotter in Taunton. Other strong wind gusts included 56 mph at the Blue Hill Observatory in Milton, 47 mph at Pocasset on Cape Cod, and 46 mph at Nantucket. Some rainfall amounts exceeding two inches included 2.74 inches in Taunton (spotter), 2.53 inches in West Mansfield, 2.51 inches in Norton,

High Wind (G57)

2.50 inches in Plymouth, 2.44 inches in Hingham, 2.41 inches in Acushnet, 2.18 inches in New Bedford, 2.08 inches in Milford, and 2.00 inches in Attleboro and at Beverly Airport. There were no reports of damage from this event.

MAZ012-015>016 Southern Worcester - Suffolk - Eastern Norfolk

2200EST

02

010>024

1350EST **Record Warmth**

0

The high temperature of 53 degrees in Worcester broke the previous record high of 52 degrees, which was set in 1984. At the Blue Hill Observatory in Milton, the high temperature of 56 degrees broke the previous record high of 55 degrees, which was also set in

1984. The high temperature of 58 degrees at Logan International Airport tied the record high for the date, which was set in 1984. MAZ004>005-Northern Worcester - Western Middlesex - Eastern Hampshire - Eastern Hampden - Southern Worcester -

Western Norfolk - Southeast Middlesex - Suffolk - Eastern Norfolk - Northern Bristol - Western Plymouth -Eastern Plymouth - Southern Bristol - Southern Plymouth - Barnstable - Dukes - Nantucket

25 0000EST **Heavy Snow** 26 0300EST

MAZ022>024 Barnstable - Dukes - Nantucket 0600EST 25 $\mathbf{0}$ Strong Winds

26 0000EST

		Time	Path	Path	Num	ber of	Estim	ated		February 1999
		Local/	Length	Width	Per	sons	Dam	age		, , , , , , , , , , , , , , , , , , ,
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

MASSACHUSETTS, Central and East

MAZ024

Nantucket

5 1600EST 0 0 High Wind (G58)

A powerful nor'easter, which passed about 200 miles southeast of Cape Cod, brought heavy snow and strong winds to the eastern third of the state. The hardest hit areas were in southeast Massachusetts, including Cape Cod, where as much as two feet of snow was reported. A peak wind gust of 67 mph was reported from Nantucket. The heavy snow and strong winds toppled trees and utility poles on the Cape

and Islands, where more than 16,000 electric customers lost power by early morning on the 26th. The storm forced the cancellation of half of the scheduled 700 flights from Logan International Airport in Boston. Rush hour traffic was snarled on the main routes out of the Boston area as well.

There was one fatality in Norton, in Bristol County, which was not directly attributed to the storm. A 9-year old boy wandered from his home and became disoriented during the heavy snow. He died as a result of exposure to the snow and cold, but had a pre-existing medical condition which led to the fatality.

Some of the higher snowfall totals from this storm included 24 inches in Harwich, 22 inches in Marstons Mills, and 20 inches in West Dennis, all on Cape Cod. Other totals on the Cape ranged from 12 to 19 inches, with the exception of 8 inches in Provincetown. Nantucket and Martha's Vineyard reported totals ranging from 17 to 19 inches. The National Weather Service Office in Taunton reported 10.9 inches, Worcester reported 10.5 inches, and Logan International Airport reported 6.5 inches of snow. The least amount of snow fell in western Massachusetts, where between 2 and 7 inches were reported in Franklin, Hampshire, and Hampden Counties.

MASSACHUSETTS, West

NONE REPORTED.

MICHIGAN, East

MIZ047>049-053>055-060>063-068>070-075>076-082>083 Midland - Bay - Huron - Saginaw - Tuscola - Sanilac - Shiawassee - Genesee - Lapeer - St. Clair - Livingston - Oakland - Macomb - Washtenaw - Wayne - Lenawee - Monroe

11 1200EST 0 0 Record Warmth 2000EST

High pressure was located over the southeast United States, while a potent low pressure system was located in the upper Mississippi Valley. In between, strong southwest winds brought unusually warm air into the Great Lakes. This resulted in the warmest February day in southeast Michigan history.

In Detroit, the temperature rose to 70 degrees. This broke the all-time February record in Detroit (old record was 68 degrees on Feb 26, 1944), and was the earliest 70-degree day in Detroit history by almost a full month.

In Flint, the high for the day was 68 degrees. This was not only the warmest February day in Flint history, but it smashed the old record by 5 degrees (63 degrees on Feb 23, 1984). Even more remarkable was that the 68 degrees obliterated the old record for February 11th by an astonishing 26 degrees!

Midland County

11 N Midland

11 2240EST 0 0 6K Thunderstorm Wind (G52)

A line of showers with a few embedded thunderstorms developed in southwest lower Michigan in the evening hours of the 11th, just ahead of a strong cold front. These showers and thunderstorms weakened as they moved into the Saginaw Valley, but were still strong enough to produce an isolated wind gust to around 60 mph. A tree was downed onto a car in Mills Township.

MICHIGAN, Extreme Southwest

NONE REPORTED.

MICHIGAN, North

Manistee County

Wellston 11 1809EST 0 0 Thunderstorm Wind (G53)

Grand Traverse County

5 W Traverse City 11 1830EST 0 0 Thunderstorm Wind (G50)

A tree was toppled on powerlines.

	Sii	orm Dai	ta and	Unusua	11 VV (eatne.	r Pnei	10M€	ena	
*		Time Local/	Path Length	Path Width	Per	ber of sons	Estima Dama	age	Character of Storm	February 1999
MICHIGAN, North	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	1
MIZ022-025>027- 031>033	Otseg	o - Benzie - G	rand Trave	rse - Kalkasl	ka - Mai	nistee - W	exford - M	Iissauke	e	

and Hangual Weath

2300EST

Moisture wrapping around a nearly stationary low over Lake Huron produced locally heavy snows across the region. Storm totals ranged from 6 to 8 inches of accumulation. The heavy wet snow created hazardous driving conditions and was a contributing factor to many accidents.

Winter Storm

MICHIGAN, Upper

MIZ002>003-009

Ontonagon - Houghton - Gogebic

1300EST

11 1800EST 0 0 Heavy Snow 12 1500EST

A low pressure system over eastern Lake Superior drew cold, moist air over western Upper Michigan on northwest winds. The relatively warm waters of western Lake Superior enhanced the snowfall amounts. Tweny-four hour snowfall totals were around 6 inches along the shoreline at Ontonagon and Silver City, but locations 10 to 15 miles inland saw accumulations of 13 inches at Houghton County Airport, 14 inches at Ironwood, and 15 Inches at Rockland.

MIZ001-003-005 Keweenaw - Houghton - Marquette

28

16 2200EST 0 0 Heavy Snow 17 1700EST

A pool of cold Canadian air was centered just north of Lake Superior as a low pressure system tracked from southern Minnesota across Wisconsin, lower Michigan and into Quebec. Precipitation started as light freezing drizzle but soon turned to snow with the arrival of the colder air. As the system moved east, most of the Upper Peninsula received from 3 to 5 inches of system snow. Northeast winds behind the low generated lake effect snow squalls along the south shore of Lake Superior with the heaviest accumulations over the north central Upper Peninsula and the Keweenaw Peninsula. Storm totals include 17 inches at the Marquette County Airport, 16 inches at Phoenix, 14 inches at the Houghton County Airport and 10 inches at Witch Lake.

MICHIGAN, West

MIZ037>040-043-043>046-050>052-056>059-064>067-071>074 Mason - Lake - Osceola - Clare - Oceana - Newaygo - Mecosta - Isabella - Muskegon - Montcalm - Gratiot - Ottawa - Kent - Ionia - Clinton - Allegan - Barry - Eaton - Ingham - Van Buren - Kalamazoo - Calhoun - Jackson

05 1900EST 0 0 Freezing Rain 2330EST

A fast moving storm system produced a mix of light freezing rain, light snow, and sleet across southern lower Michigan during the evening hours. The band of precipitation was narrow, and the precipitation was light, and only lasted for 3 to 4 hours. No damage was reported.

Mason County

Ludington 11 1737EST 0 0 10K Thunderstorm Wind
Trees were reported downed by strong winds in Ludington.

Newaygo County

Trees were downed by strong winds in Hesperia.

Lake County

Baldwin 11 1800EST 0 0 10K Thunderstorm Wind

A 60 mile per hour wind gust was reported in Baldwin, and 18" diameter trees were downed.

Newaygo County

Bitely 11 1810EST 0 0 10K Thunderstorm Wind

Trees were downed by strong winds and covered some roadways in Bitely. A 58 mile per hour wind gust was reported in White

Cloud.

Osceola County

Hersey 11 1830EST 0 0 1K Thunderstorm Wind

Strong winds blew out a garage door in Hersey.

Calhoun County

Pine Creek 11 1911EST 0 0 Thunderstorm Wind (G51)

A 60 mile per hour wind gust was reported at Pine Creek.

Allegan County

Moline 11 2125EST 0 0 0 Thunderstorm Wind (G59)

Number of

Estimated

February 1999

Path

MICHIGAN, West A 68 mile per hour wind gust was reported in Moline. Kent County Sparta 11 2126EST A 58 mile per hour wind gust was reported in Sparta.	Character of Storm
A 68 mile per hour wind gust was reported in Moline. Kent County Sparta 11 2126EST 0 0	
Kent County Sparta 11 2126EST 0 0	
Sparta 11 2126EST 0 0	
A 30 lille per nour while gust was reported in Sparta.	Thunderstorm Wind (G50)
Kent County	
Grand Rapids 11 2131EST 0 0	Thunderstorm Wind (G55)
A 63 mile per hour wind gust was reported in Grand Rapids.	munucistoriii vvina (333)
Barry County	
Middleville 11 2138EST 0 0 10K	Thunderstorm Wind
Wind damage was reported and some power lines were downed by strong winds.	
Mecosta County	
Big Rapids 11 2146EST 0 0	Thunderstorm Wind (G61)
A 70 mile per hour wind gust was reported in Big Rapids.	
Ionia County	
Saranac 11 2155EST 0 0 10K Some wind damage was reported including downed power lines.	Thunderstorm Wind
Montcalm County	
Greenville 11 2213EST 0 0 10K	Thunderstorm Wind
Trees were downed by strong winds.	munucistorm vvinu
Montcalm County	
Sheridan 11 2223EST 0 0 10K	Thunderstorm Wind
Some power lines were downed by strong winds.	
Clare County	
Clare 11 2230EST 0 0 10K	Thunderstorm Wind (G51)
A 60 mile per hour wind gust was reported and some trees were downed.	
Gratiot County	T1 1
Alma 11 2240EST 0 0 10K Some trees and power lines were downed by strong winds.	Thunderstorm Wind
A cold front moving west to east across the Great Lakes region triggered the development	of showers and thunderstorms over
southern lower Michigan during the evening hours of the 11th. Temperatures preceding the from	ntal passage rose into the upper 60's
to around 70 degrees. Thunderstorms developed and a bow echo formed during the early evening of 50 to 70 mile per hour wind goots, come wind demand including downed trees.	ng hours. It produced several reports
of 50 to 70 mile per hour wind gusts, causing some wind damage, including downed trees.	
Later that evening, a line of rain showers associated with the actual cold front produced widespre	ead reports of 60 to 70 mile per hour
winds. As a result, there were many downed trees and power lines.	
MIZ043>044- Oceana - Newaygo - Muskegon - Montcalm - Ottawa - Kent - Ionia - Allegan - E 050>051-056>058- Kalamazoo - Calhoun	Barry - Eaton - Van Buren -
064>066-071>073	
12 1100EST 0 0	Lake Effect Snow
13 0400EST Lake affect many developed course continuent are lower Michigan as atmosp west winds of 20 to	

Lake effect snow developed across southwestern lower Michigan as strong west winds of 20 to 30 miles per hour moved over the relatively warm waters of Lake Michigan. Reports of 1 to 4 inches of snow were common. Due to the strength of the wind, the lake effect snow bands were able to move inland quite a ways. As the wind diminished overnight and became more northwest, the snow ended east of US-131. However, snow continued until the early morning hours from US-131 west to the lakeshore.

The following is a list of specific snowfall totals for the 12th through the early morning hours of the 13th:
6.2 inches in Allegan (Allegan County); 3.9 inches in Grand Rapids (Kent County); 3.2 inches in Hastings (Barry County); 3 inches in Grandville (Kent County); 3 inches in Sparta (Kent County); 2 inches in Holland (Allegan County); 1 inch in St. John's (Clinton County); 1 inch in Hudsonville (Ottawa County); 1 inch in Muskegon (Muskegon County); 0.4 inches in Lansing (Ingham County).

MINNESOTA, Central and South Central

NONE REPORTED.

Time

Path

		Time Local/	Path Length	Path Width		Number of Estimated Persons Damage			February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm

MINNESOTA, Northeast

MNZ010>012-018>021-025>026-033>038

Koochiching - Northern St. Louis - Northern Cook / Northern Lake - Northern Itasca - Central St. Louis -Southern Lake - Southern Cook - Northern Cass - Southern Itasca - Southern Cass - Crow Wing - Northern

Aitkin - Southern Aitkin - Southern St. Louis / Carlton - Pine

1630CST

Freezing rain and freezing drizzle coated much of northeastern Minnesota with as much as 1/4 inch of ice. Many traffic accidents were reported.

Ice Storm

MNZ021 Southern Cook

> 1930CST 0 0 High Wind (G49) 12 0300CST

An intense winter storm produced winds as high as 56 mph (49 knots) along the Lake Superior shoreline from Lutsen to Grand

MINNESOTA, Northwest

MNZ001>002-004>005-007>008-013>014

West Polk - Norman - Kittson - Roseau - West Marshall - East Marshall - Pennington - Red Lake

0300CST

12 0 Blizzard 1100CST

A strong north wind, behind a low pressure area over the western Great Lakes, produced ground blizzard conditions across the northern Red River Valley during the early morning hours. A peak wind of 51 mph was reported at the Hallock airport. Snow amounts were light, ranging from a trace to 2 inches. US Highway 2 was closed from East Grand Forks to Crookston. Many accidents occurred and several motorists were stranded until conditions improved later in the morning. Some schools closed for the morning, and others closed for the whole day.

MINNESOTA, Southeast

MNZ086>087-094>095

Dodge - Olmsted - Mower - Fillmore

1500CST 11 Winter Storm 2030CST

After a round of thunder, lightning and rain showers in the morning, a mix of freezing rain, sleet and snow changed to all snow by afternoon. Even though only 1 to 3 inches of snow accumulated, north winds gusting up to 50 mph caused whiteout conditions. KTTC TV in Rochester reported near zero visibility during the late afternoon and evening as a result of strong winds and blowing snow.

MINNESOTA, Southwest

NONE REPORTED.

MINNESOTA, West

NONE REPORTED.

MINNESOTA, West Central

NONE REPORTED.

MISSISSIPPI, Central

Copiah County						
Hazlehurst	03	1820CST	0	0	50K	Hail (1.75)
	Golfba	all size hail produced minor da	mage to roofs and automo	obiles.		
Copiah County						
15 SW Hazlehurst	09	1340CST	0	0		Hail (1.50)
Copiah County						
10 SW Hazlehurst	09	1415CST	0	0	20K	Hail (1.75)
	Golfba	all size hail caused minor dama	age to several roofs and au	utomobiles		
Copiah County						
Wesson	09	1431CST	0	0	30K	Hail (1.75)
	Golfba	all size hail caused minor dama	age to several roofs and au	utomobiles		
Covington County						
6 E Collins	09	1510CST	0	0	20K	Thunderstorm Wind

		Time	Path	Path		Number of		nated	February 1999	
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per Killed	sons Injured	Dan Property	nage Crops	Character of Storm	
MISSISSIPPI, Centr				(,		J	T J	- 1		
WIIDDIDDII I I, CCIII		al trees and pov	ver lines were	blown down.						
Lincoln County										
Brookhaven	09	1510CST			0	0	75K		Hail (1.75)	
Jones County	Golfb	all size hail cau	sed minor dar	nage to many r	oofs and au	tomobiles.				
3 N Laurel	09	1530CST			0	0			Hail (1.00)	
Jefferson Davis County	0)	1330031			v	v			11111 (1.00)	
Bassfield Leflore County	09	1615CST			0	0			Hail (0.75)	
Minter City	27	1520CST			0	0			Hail (0.75)	
Lawrence County										
3 SW Sontag to 1 S New Hebron	27	1525CST 1545CST	17	440	0	0	200K	al araga Iz	Tornado (F3) nocking down many trees and power	
									bron. Several homes received major	
Grenada County										
Grenada		1600CST bile home was throughout the			0 was reported	0 d. Window	75K s were blow	n out of s	Thunderstorm Wind everal automobiles. Trees were blown	
Yazoo County	down	unoughout the	enty of Grena	uu.						
Yazoo City	27	1600CST			0	0			Thunderstorm Wind (G52)	
Carroll County										
Carrollton	27 Sever	1610CST al trees were ble	own down.		0	0	5K		Thunderstorm Wind	
Montgomery County										
Countywide	27 Sever	1630CST al trees were ble	own down.		0	0	5K		Thunderstorm Wind	
Yazoo County										
Countywide	27 Trees	1630CST and power line	s were blown	down througho	0 out the coun	ty.	35K		Thunderstorm Wind	
Warren County										
5 S Vicksburg	27 Sever	1631CST al trees were ble	own down.		0	0	2K		Thunderstorm Wind	
Adams County										
Kingston Webster County	27	1635CST			0	0			Hail (1.00)	
Clarkson	27 Sever	1640CST al trees were ble	own down.		0	0	2K		Thunderstorm Wind	
Attala County										
Countywide	27 Nume	1645CST erous trees and p	owerlines we	ere blown down	0 throughout	0 t the county	100K . Several ho	ouses were	Thunderstorm Wind damaged.	
Madison County										
Countywide	27 Sever	1645CST al trees were ble	own down thr	oughout the co	0 unty.	0	10K		Thunderstorm Wind	
Franklin County										
Roxie	27 Sever	1700CST al trees were ble	own down.		0	0	2K		Thunderstorm Wind	
Hinds County										
Jackson									Thunderstorm Wind and windows were blown out of a bank les were blown down.	

		Time	Path	Path	Number of		Estimated		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per Killed	sons Injured	Dam Property	age Crops	Character of Storm
MISSISSIPPI, Centra	al			, ,		3	1 3		
Clay County	41								
Countywide	27	1715CST			0	0	30K		Thunderstorm Wind
·	A barr	n received majo	or damage and	d several roofs r	eceived mir	nor damage	e. Several tre	es were bl	own down.
Franklin County									
Meadville	27	1715CST			0	0			Hail (0.75)
Franklin County	27	1515.00T			0	0	51 7		The same and a same and a same and a same and a same a
Meadville	27 Severa	1715CST al trees were blo	own down.		0	0	5K		Thunderstorm Wind
Leake County									
Countywide	27	1715CST			0	0	100K		Thunderstorm Wind
		al chicken hous blown down thr			major dam	age. A cou	uple of manu	factured h	omes received minor damagel. Trees
Lincoln County	were	nown down un	oughout the C	Jounty.					
8 NW Brookhaven to	27	1720CST			0	0	10K		Thunderstorm Wind
5 NW Brookhaven			1 6						
Lincoln County	Trees	were blown do	wn and a few	structures recei	ved damage	е.			
Countywide	27	1730CST			0	0			Hail (0.75)
Neshoba County	21	1750051			U	v			Han (0.73)
Countywide	27 The w	1735CST rindows were bl	lown out of s	everal cars and o	0 chicken hou	0 se roofs w	35K ere damaged	•	Thunderstorm Wind
Copiah County									
Countywide	27 Severa	1745CST al trees and pow	ver lines were	e blown down. A	0 mobile ho	0 me receive	20K ed damage.		Thunderstorm Wind
Kemper County									
De Kalb	27 Severa	1745CST al trees were blo	own down an	d some roofing	0 was torn.	0	10K		Thunderstorm Wind
Lincoln County									
Countywide	27 Severa	1745CST al barns were de	estroyed and	a few mobile ho	0 mes receive	0 ed damage.	125K . Several root	fs were blo	Thunderstorm Wind own off of houses.
Scott County									
10 NW Forest	27 Severa	1745CST	own down.		0	0	2K		Thunderstorm Wind
Copiah County									
Wesson	27	1750CST			0	0	100K		Thunderstorm Wind
T	Many	homes, a few b	ousinesses, an	nd a church were	damaged.	Numerous	trees and po	wer lines v	were blown down.
Lawrence County		1850.CCT	_						
Oma	27 This w	1750CST veak tornado bl	1 ew down sev	50 eral trees. One to	0 ree fell on a	0 house tran	25K	neonle in	Tornado (F0) side
Rankin County							r8	F F	
Brandon	27	1750CST	wn down onto	o a house and ve	0 hicle A uti	0 lity pole w	15K	ed down	Thunderstorm Wind
Jefferson Davis County	71 icw	uces were blov	wii dowii onto	o a nouse and ve	meie. 71 du	nty poie w	as also knoch	ced down.	
Countywide	27 Trees	1815CST were blown do	wn throughou	at the county.	0	0	15K		Thunderstorm Wind
Smith County			2	·					
Taylorsville	27 Severa	1822CST	own down.		0	0	5K		Thunderstorm Wind
Jasper County									
Countywide	27 Trees	1828CST and power lines	s were blown	down througho	0 ut the coun	0 ty. Five chi	30K icken houses	were dam	Thunderstorm Wind aged in Bay Springs.

		Time	Path	Path		Number of		nated	February 1999	
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per Killed	rsons Injured	Dan Property	nage Crops	Character of Storm	
MISSISSIPPI, Centra			((,		J	T. J			
Covington County	<u>aı</u>									
Seminary	27	1830CST	,		0	0	2K		Thunderstorm Wind	
Standary .		v trees were bl			v	Ū				
Scott County										
Forest	27 Sever	1830CST ral trees were b			0	0	2K		Thunderstorm Wind	
Forrest County										
Countywide	27 Sever	1845CST ral trees were b		roughout the co	ounty.	0	2K		Thunderstorm Wind	
Jones County										
Countywide	27 Sever	1845CST ral trees and po		e blown down.	0	0	15K		Thunderstorm Wind	
Clarke County										
Countywide	27 Sever	1900CST		roughout the co	ounty.	0	2K		Thunderstorm Wind	
Holmes County					•					
Lexington	27 Sever	1645CST ral trees were b		d a few houses	0 received mi	0 inor roof da	25K amage.		Thunderstorm Wind	
MISSISSIPPI, North										
Marshall County										
Slayden	07	0205CST 0210CST			0	0	1K		Thunderstorm Wind (G53)	
.	A cou	uple of trees w	ere knocked do	own.						
Lafayette County										
Oxford	09	2100CST 2330CST	•	e mud slid dow	0 m an amban	0 Irmant blace	1K		Flash Flood	
Lafayette County	Aillo	oone nome was	i iiooded. Soiii	e muu snu uow	ii ali cilibali	Killellt bloc	Kilig a load.			
Oxford	09	2230CST 2235CST			0	0	1K		Thunderstorm Wind	
	A me		s ripped from a	a building.						
Pontotoc County										
Pontotoc	27	1625CST 1630CST			0	0	5K		Thunderstorm Wind	
	Sever	ral power lines	were knocked	down.						
Calhoun County										
Calhoun City	27	1640CST 1645CST v trees were blo	1		0	0	5K		Thunderstorm Wind	
Chickasaw County	Alew	v tiees were or	owii dowii.							
Chickasaw to Okolona	27	1707CST 1720CST			0	0	40K		Thunderstorm Wind	
Okololia	A trai			na. One home s	uffered exte	nsive dama	age. Some ti	rees and p	ower lines were blown down.	
Lee County								•		
Belden	27	1707CST 1715CST			0	0	0.01K		Hail (0.75)	
Lee County										
Mooreville	27	1712CST 1725CST	1		0	0	20K		Thunderstorm Wind	
Itamond - C	Some	highway sign	s were blown	down. Several t	rees and pov	wer lines w	ere also kno	cked dow	n. One tree fell on a mobile home.	
Itawamba County	25	1815000	,				2577		m 1 4 xx/ 1	
Dorsey to Fulton	27	1715CST 1725CST			0	0	25K		Thunderstorm Wind	
	A roof was blown off of a house. A 400 foot cellular phone tower was destroyed. Several other homes and shops were damaged. Several trees were blown down.									

		Time	Path	Path		ber of	Estim		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per Killed	sons Injured	Dam Property	age Crops	Character of Storm
MISSISSIPPI, North								•	
Monroe County									
Aberdeen	27	1715CST			0	0	25K		Thunderstorm Wind
		1720CST							
Clay County	One n	nobile home w	as destroyed.	A small buildin	ig was blowi	1 into the st	reet. Severa	I trees and	power lines were knocked down.
Clay County Montpelier to	27	1720CST			0	0	20K		Thunderstorm Wind
Pheba	21	1720CST 1730CST			U	U	20K		i nunderstorm wind
	Sever	al homes suffe	red roof dama	ge. Some trees	and power l	ines were a	lso blown d	own.	
MISSISSIPPI, South Wilkinson County									
Rosetta	27	1653CST 1654CST			0	0			Hail (1.75)
TH 6	Golf l	ball sized hail v	was reported b	y storm spotter					
Pike County									
Summit	27	1740CST derstorm wind	ousts downed	several trees o	0 f the north si	0 ide of Sumi	0.50K	south of I	Thunderstorm Wind Lake Dixie Springs.
MISSISSIPPI, South		acistoriii wina	gusts downed	severar trees o	r the north s	ide of Buill	ini ana jast	south of L	ake Divie Springs.
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									
	NON	E REPORTED).						
MISSOURI, East									
Clark County									
Kahoka	11	1205CST			0	0			Hail (1.00)
Clark County									
Kahoka	11 The sh	1205CST heriff office rep	oorted 1 inch l	nail and some to	0 rees down.	0			Thunderstorm Wind (G52)
Shelby County									
7 E Shelbina	11 The sh	1205CST heriff office rep	orted several	large trees dow	0 n near Hunr	0 newell Lake	s.		Thunderstorm Wind (G55)
Lewis County									
Canton Lewis County	11	1210CST			0	0			Hail (1.00)
Canton	11 Storm	1210CST spotters estim	ated wind gus	ts around 80 m	0 ph which do	0 wned sever	al trees. 1 ir	nch hail al	Thunderstorm Wind (G70) so fell.
Marion County		•			-				
7 W Palmyra	11	1225CST			0	0			Thunderstorm Wind (G61)
Marion County									
3 E Palmyra	11 The sh	1230CST heriff office rep	orted many tr	rees down along	0 g county road	0 ds both wes	at and east o	f Palmyra.	Thunderstorm Wind (G61)
Osage County									
3 E Linn	11 The sh	1307CST heriff office rep	orted trees do	own along High	0 way 89 east	0 of Linn.			Thunderstorm Wind (G55)
Gasconade County		•			·				
3 E Drake	11 The sh	1320CST heriff reported	trees down ne	ar Highway ZZ	0	0			Thunderstorm Wind (G60)
Franklin County									
New Haven	11	1330CST			0	0			Thunderstorm Wind (G55)
Franklin County									
Union	11 Storm	1330CST spotters repor	ted trees down	n in New Have	0 and Union.	0			Thunderstorm Wind (G55)
Franklin County									
Washington	11 Storm	1335CST spotters repor	ted trees down	n in Washington	0	0			Thunderstorm Wind (G55)

		Time	Path	Path		iber of	Estim		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per Killed	rsons Injured	Dam Property	age Crops	Character of Storm
MISSOURI, East									
Warren County									
Dutzow	11	1340CST			0	0			Thunderstorm Wind (G60)
Warren County									` ,
Wright City		1345CST spotters reported of landed against					of of the old c	ity hall bu	Thunderstorm Wind (G60) iilding in Wright City was blown off.
Lincoln County									
3 SE Whiteside to 8 ENE Whiteside	11	1353CST 1358CST	6	70	0	0	100K		Tornado (F1)
	near th F1 wh	ne initial formati	on point. Sev e damage pat	eral power pol h was F0. The	les and larg	e trees we	re either snap	ped off or	ns and 2 utility sheds were destroyed uprooted. This damage was rated at stroying a few more utility buildings,
Pike County									
2.5 SW Annada to	11	1359CST	6.4	100	0	0	200K		Tornado (F2)
3.6 NE Annada	from s extend travell	southwest of And led for about 6 1	nada in Pike 0 /2 miles fron f and destroy	County, MO, no southwest of ing one home a	ortheast act Annada to and damagi	ross Calho the Missis ng 2 other	oun County, II sippi river we s. 2 of the 4 s	L, then intest of Moz	nado which tracked for 20 plus miles to Pike County, IL. The first segment zier IL. The tornado started out at F2 e destroyed home were blown 100 to
Lincoln County									
Elsberry	11	1400CST			0	0			Thunderstorm Wind (G55)
Lincoln County									
Winfield	11 Storm	1400CST spotters reported	d trees down	in Elsberry and	0 1 Winfield.	0			Thunderstorm Wind (G55)
Franklin County	Dioini	spotters reporte	a arees do war	Zigovily uni	. ,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Washington	11 Thund	1400CST lerstorm wind gu	ısts downed s	ome trees and	0 power lines	0 in Washii	ngton.		Thunderstorm Wind (G52)
Crawford County									
Cuba Crawford County	27	1110CST			0	0			Hail (1.75)
Bourbon	27 The co	1112CST ounty sheriff rep	orted golfball	size hail in Cu	0 iba and 1 in	0 ch hail in l	Bourbon.		Hail (1.00)
St. Louis County									
Ballwin St. Louis County	27	1130CST			0	0	50K		Hail (1.00)
Brentwood St. Louis County	27	1130CST			0	0			Hail (0.75)
Crestwood	27	1130CST			0	0			Hail (0.75)
St. Louis County Kirkwood	27	1130CST			0	0	100K		Hail (1.75)
St. Louis County					-				
Maplewood St. Louis (C)	27	1140CST			0	0	50K		Hail (1.00)
St Louis	27	1145CST			0	0	250K		Hail (1.75)
St. Louis (C)	c-	ده و د				_	=		TT 11 (A A B)
St Louis	damag		ne area, espec	cially in a swat	th from wes				Hail (2.25) ameter. Roofs and automobiles were theast into the City of St Louis. At a
Washington County									
Old Mines	27	1200CST			0	0			Hail (1.00)

		Time	Path	Path		ber of	Estima		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per: Killed	sons Injured	Dama Property	age Crops	Character of Storm
MISSOURI, East								•	
Washington County									
2 N Potosi	27	1205CST			0	0			Hail (1.00)
	Storm	spotters report	ted 1 inch hail	in Old Mines a	nd just nortl	h of Potosi			
Washington County		1000 CC							
16 NW Potosi	27 A stori	n spotter repo	rted 1 inch ha	il 10 miles south	0 1 of Sullivan	0 n, or 16 mil	les northwest	of Potosi	Hail (1.00) along Highway 185.
Jefferson County		1 1				,			
Antonia	27 Amate	1225CST ur radio spotte	ers reported 1	inch hail in Ant	0 onia.	0			Hail (1.00)
Jefferson County									
De Soto	27	1237CST			0	0			Hail (1.00)
MISSOURI, Lower	The co	unty sheriff re	eported I inch	hail in De Soto.					
	NONE	E REPORTED).						
MISSOURI, Northw	<u>est</u>								
MOZ031-039-044- 046-054	Carro	oll - Saline -	Johnson - (Cooper - Hen	ry				
	01 05	0000CST			0	0			Flood
	Minor heavy Carrol	rain on Janua ton, MO, Blac	ary 30 and 3 kwater River	1. The Big Cr	eek at Blai MO and at I	rstown, M Blue Lick,	O, South Gr MO, the Peti	and Rive	ebruary. The flooding was a result of er at Urich, MO, Wakenda Creek at Creek at Boonville, MO as well as the
MOZ039>040-044- 046-054	Salin	e - Howard	- Johnson -	Cooper - Hei	nry				
	07	0000CST			0	0			Flood
	MO, S	outhGrand Ri	ver at Urich, 1	MO, Blackwater	River at V	alley City,	MO and at 1	Blue Lick	lissouri. The Big Creek at Blairstown, K., MO, the Petite Saline at Boonville, od stage on February 7th and 8th.
Cass County									
Raymore	11 Outbu	0900CST	ed by thunder	storm winds.	0	0	25K		Thunderstorm Wind (G60)
Jackson County									
Lake Winnebago	11	0915CST			0	0	80K		Thunderstorm Wind (G60)
Muni		erstorm winds rowhead Yach	-	tree into a hom	e causing da	amage to s	everal windo	ws and a	deck. Part of the roof was torn off of
Carroll County									
Carrollton	11 62 MF	0952CST PH wind gust r	reported at Car	rrollton.	0	0			Thunderstorm Wind (G62)
Linn County									
8 S Brookfield	11 Barn o	1025CST lestroyed by the	nunderstorm v	rinds.	0	0	30K		Thunderstorm Wind
Johnson County									
(Szl)Whiteman Afb	11 58 MF	1035CST PH wind gust r	recorded at W	hiteman AFB.	0	0			Thunderstorm Wind (G58)
Macon County									
1 N New Cambria	11 Thund	1045CST erstorm winds	s blew down a	chimney and a	0 television a	0 ntenna. A	30K small grain b	oin was li	Thunderstorm Wind fted from its foundation.

		Time	Path	Path		ber of	Estimat		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Killed	sons Injured	Damaş Property	ge Crops	Character of Storm
MISSOURI, Northw	est								
Adair County	<u> </u>								
Kirksville	11	1102CST			0	0			Thunderstorm Wind (G67)
	67 MP	H wind gust r	ecorded at Ki	rksville Cannon	Memorial A	Airport.			
Howard County		44 4 0 GGT							
4 NE Glasgow	11 Severa	1120CST 1 large trees d	owned by thu	nderstorm wind	0	0			Thunderstorm Wind (G70)
Randolph County	50,014	i mige trees a	owned by the	indensionini wind					
3 E Cairo	11	1135CST			0	0	5K		Thunderstorm Wind
		rt torn away f	rom a mobile	home.					
MISSOURI, Southea		C:1	C 44 - N /1*						
MOZ087-111>112- 114	Cape	Girardeau	- Scott - Mi	ssissippi - Ne	w Madrid				
114	01	0001CST			0	0			Flood
	12	2200CST							
									areas were agricultural bottomlands, perienced flooding from late January
									37.1 feet on the 5th. A separate flood
			river past Ca	ape Girardeau a	round the 10	Oth. The c	rest at Cape G	irardeau	on the 10th was only about 1.5 feet
MOZ100	Wayn	lood stage.							
1,102100	07	1800CST			0	0	5K		Flood
	08	1800CST							
									ne vicinity of Patterson. At Patterson, esulted in minor to moderate flooding
		_		est crest at Patte					
MOZ108	Riple	y							
	09	0100CST			0	0	3K		Flood
	Heavy	1400CST rain over the	hilly terrain o	of central Misso	uri caused th	ne Current	River to rise	above flo	ood stage. At Doniphan, where flood
	stage is	13 feet, the c	rest of 15.1 fe	eet occurred at 6	A.M. This	resulted in	flooding of lo	w-lying	agricultural areas and roadways.
Bollinger County									
2 E Marble Hill	11 Thund	1543CST erstorm wind	s blew a hou	ise trailer off it	0 s foundation	0 n and par	50K tially unroofed	la mach	Thunderstorm Wind nine shed. A large old building was
	destroy					F	,		
D C 4									
Perry County	11	1 <i>55</i> 1 CCT			•				TI 1 (050)
Perryville Scott County	11	1551CST			0	0			Thunderstorm Wind (G50)
Chaffee	11	1648CST			0	0	20K		Thunderstorm Wind
Charlee			blew a roof	off a house. Nin				l. Debris	from the roof damaged another house
	nearby	. In the same	area, power li	nes were down.					
Mississippi County									
6 W Charleston	11	1740CST			0	0	10K		Thunderstorm Wind
o vv charleston		ty pole was bl	own over.		v	v	TOIL		munucistoriii vvinu
Perry County									
Silver Lake to	27	1330CST			0	0	6M		Hail (2.00)
Farrar	An ext	ensive hailsto	rm pounded	much of Perry (County with	hailstones	s up to 2 inche	es in diar	neter, which is slightly bigger than a
	golf ba	ıll. In downto	wn Perryville	, hailstones me	asuring up to	2 inches	in diameter fe	ell for 10	to 12 minutes. Insurance companies
									cles, skylights were broken, and vinyl town. At the Perry County Sheriff
									All 200 vehicles at an auto dealership
	near I-	55 and Route	51 received d	amage, includir	ig some brok	ken windsl	nields.		•
Perry County		40.00							
Farrar	27	1340CST			0	0	25K		Thunderstorm Wind

		Time	Path	Path		iber of	Estim		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per Killed	rsons Injured	Dam Property	age Crops	Character of Storm
MISSOURI, Southe	ast								
		e thunderstorm	winds uproof	ted large trees a	and knocked	a shed off	its foundation	n.	
Wayne County									
Greenville Bollinger County	27	1355CST			0	0			Hail (0.88)
6 N Marble Hill	27	1422CST			0	0			Hail (1.75)
MISSOURI, Southw		1122001			v	v			11an (1.75)
Taney County									
Countywide	06	2000CST 2300CST			0	0			Flood
Douglas County									
Countywide	06 07	2045CST 0000CST			0	0	30K		Flood
Ozark County									
Countywide	06 07	2100CST 0000CST			0	0			Flood
Shannon County	07	0000001							
Countywide	06 07	2100CST 0400CST			0	0			Flood
Texas County									
Countywide	06 07	2130CST 0230CST			0	3	30K		Flood
Wright County									
Countywide	06 07	2130CST 0230CST			0	0			Flood
Dent County									
Countywide	07	0000CST 0400CST			0	0			Flood
								tral Misso	ouri. The heaviest rain fell in eastern
	their c		off of the road	along the Big					ple were treated for hypothermia after in Texas County. They waited in cold
Ozark County	Severa	al roads and bri	dges in Texas	and Douglas	Counties wer	e damaged	l or destroye	d.	
Isabella	06	2200CST			0	0	25K		Thunderstorm Wind
2545 524	Thunc				and uproote	ed large tr		Highway	near Isabella. Several buildings also
Jasper County			, =						
Joplin Arpt Dade County	11	0957CST			0	0			Thunderstorm Wind (G58)
Greenfield	11 Nielse	1032CST I sized and win	d avata aatim	atad at 52 kmat	0	0			Tstm Wind/Hail
Polk County	Nicke	i sizeu anu win	u gusts estilli	ateu at 32 knot	s were report	ieu.			
Bolivar	11	1105CST			0	0			Thunderstorm Wind (G52)
Greene County									, ,
5 NW Republic	11 Thunc	1120CST derstorm winds	blew down se	everal trees.	0	0	0		Thunderstorm Wind
Stone County									
Reeds Spg	11 A trai	1130CST ler sustained ro	of damage.		0	0	5K		Thunderstorm Wind
Dallas County									
Buffalo	11 Thunc	1145CST derstorm winds	downed trees	i.	0	0	0		Thunderstorm Wind

		Time	Path	Path	Numb		Estimated	February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Pers Killed	sons Injured	Damage Property Crops	Character of Storm
MISSOURI, Southwe	est							
Webster County								
Marshfield								Thunderstorm Wind rarehouse/showroom. A portion of the y van was also damaged.
Camden County								
Osage Beach Wright County	11	1200CST			0	0		Thunderstorm Wind (G57)
1 N Grovespring	11 Thunde	1225CST rstorm winds	blew a tree do	own onto Highw	0 vay TT.	0	0	Thunderstorm Wind
Miller County								
4 W Brumley	11 Thunde	1230CST rstorm winds	blew a tree do	own onto Highw	0 yay 42.	0	0	Thunderstorm Wind
Pulaski County								
Ft Leonard Wood Aaf Wright County	11	1251CST			0	0		Thunderstorm Wind (G62)
Hartville Wright County	27	1045CST			0	0		Hail (0.75)
Mansfield Phelps County	27	1110CST			0	0		Hail (0.75)
Edgar Spgs Texas County	27	1130CST			0	0		Hail (0.75)
Licking Texas County	27	1135CST			0	0		Hail (0.75)
7 N Houston Douglas County	27	1150CST			0	0		Hail (0.75)
Ava Ozark County	27	1154CST			0	0		Hail (0.88)
Wasola Oregon County	27	1245CST			0	0		Hail (0.75)
6 W Alton Oregon County	27	1330CST			0	0		Hail (1.75)
Myrtle MONTANA, Central	27	1425CST			0	0		Hail (1.00)
MTZ009	Rocky	Mountain 1	Front					
1112007	01 02	0400MST 2000MST			0	0		High Wind (G77)
N #7577.04.0		T BUTTE AT			/ T * T			
MTZ010			Eastern Po	ndera / Toole	•			
	01 02 CUT B	0400MST 2000MST ANK AWOS	AT 1414/2N	D AND 11SE V	0 'ALJER 065	0 5 MST/2N	ID	High Wind (G52)
MTZ011		/ Chouteau			TELETT COD	0 1/10 1/21		
	01	1600MST			0	0		High Wind (G72)
	02 CHING	2000MST OOK 11S AT	1748/2NDF	T BELKNAP C	664 KT AT			
MTZ012	Casca	de / Eastern	Teton					
				ASOS G58KT T AT 0130 MS'		0 .9S ULM (G58KT 1450/2ND M	High Wind (G59) ST6NNE FAIRFIELD G55KT 1443
MTZ013		s / Judith B						
	01 02	1600MST 2000MST			0	0	5K	High Wind (G67)

		Time	Path	Path		iber of	Estim		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per Killed	rsons Injured	Dam Property	age Crops	Character of Storm
MONTANA, Central								•	
worth, central	-	ARNEILL 033	0 MST AND	1E ROY AT 05	502 MST.				
MTZ009	Rock	y Mountain	Front						
	02	0400MST 1700MST	1		0	0			Blizzard
MT7000			ND HEART E	BUTTE LOW V	'ISIBILITY				
MTZ008	Beave 02	erhead 1900MST			0	0			TT: 1 TT: 1 (CEE)
		GRANT			0	0			High Wind (G55)
MTZ014	Broa	dwater / Jef	ferson / Mea	agher / Cent	ral And So	outhern I	Lewis And	Clark	
	02 03 HLN	2100MST 0400MST ASOS ESTIM	1	LDER 57KT A	0 T 0223/3RI	0 DSILVER	100K	Т АТ 232	High Wind (G61)
MTZ015		tin / Madiso		55511071111	0220,010	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	. 011 1 0 / 11		
	02	2116MST			0	0	15K		High Wind (G52)
		EMAN 6E							
MTZ015		tin / Madiso							
	06 07 8 TO	1100MST 0500MST 10 INCHES A	1	LOWSTONE	0	0			Heavy Snow
MTZ010				ndera / Tool	e / Liberty	7			
	06 07 VALI	1600MST 1200MST ER 13SE AT 1	ı		0	0			High Wind (G51)
MTZ011		e / Choutea							
	06 07 CHIN	1600MST 1200MST TOOK 11S AT	ı		0	0			High Wind (G57)
MTZ012	Casca	ade / Easter	n Teton						
	06 07	1600MST 1200MST 13SE AT 073	1		0	0			High Wind (G53)
MTZ013		us / Judith B							
	06 07	1600MST 1200MST DHAM 2NW A	•		0	0			High Wind (G55)
MTZ009		y Mountain							
	06 07	1700MST 1200MST		- C	0	0			Winter Storm
MTZ013		GLACIER 6' us / Judith B		23					
WILDIS	08 ROY	0430MST			0	0			High Wind (G54)
MTZ011		ie / Choutea	u / Hill						
	08	0946MST	ı		0	0			High Wind (G59)
	CHIN	OOK 11SFT	BELNAP 53	KT AT 1100.					
MTZ012		ade / Easter							
	09 10	1100MST 0500MST	ı	RFIELD 6 INC	0 THES NIEL	0 14 pt 8 nn	IW 8 INCHE	7 5	Winter Storm
MTZ010				ndera / Tool			O INCHE	a.J	
	09 10	1430MST 0500MST			0	0			Winter Storm
	GOLL	D BUTTE 7 IN	CHES						

		Time Local/	Path Length	Path Width	Numb Pers		Estimated Damage	February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property Crops	Character of Storm
MONTANA, Central								
MTZ009		Mountain	Front					
	09	1600MST			0	0		Winter Storm
	10 EAST	0800MST	NCHES CI	BSON DAM 6 l	INCHES			
MTZ015		in / Madiso		DSUN DAM 0	INCHES			
1112013	09	2200MST			0	0		Heavy Snow
	10	1700MST						reavy snow
N. 475/7.000			NCHESEN	INIS 7 INCHES	GALLAT	IN GATEV	WAY 6 INCHES	
MTZ008	Beave							
	09 10	2200MST 1700MST			0	0		Heavy Snow
	LAKE	VIEW 9 INCH	IES					
MTZ013	_	s / Judith B	asin					
	09 10	2320MST 0500MST			0	0		Winter Storm
		6 INCHES						
MTZ014	Broad	water / Jeff	erson / Me	agher / Centr	al And So	uthern L	ewis And Clark	
	23	0800MST			0	0		Heavy Snow
	6 INCH	1300MST IES AUSTIN	1W					
MTZ011		/ Chouteau						
	23	1219MST			0	0		High Wind (G58)
				P G50 AT 1300/	23RD.			
MTZ011		/ Chouteau	ı / Hill					
	25 26 WARR	1800MST 1200MST ICK 2NW 8 I	NCHES		0	0		Heavy Snow
MTZ015	Gallat	in / Madiso	n					
	25 26 NORR	1800MST 1200MST IS 6 INCHES			0	0		Heavy Snow
MONTANA, East								
MTZ016>017- 021>023-026	Phillip	s - Valley -	Petroleum	- Garfield - I	Mccone - P	rairie		
	02 03	2100MST 0300MST			0	0		High Wind (G61)
	A stron to 55 m	g storm syster						Vind speeds were sustained in the 45 and 69 mph reported at Zortman in
MONTANA, South								
MTZ028-031- 034>035-038	Whea	tland - Rose	bud - Still	water - Yellov	vstone - Bi	g Horn		
	01	2000MST			0	0		High Wind (G80)
	across s reported Livings Stillwat	southwestern (d sustained witton. Several ter County, wi	Canada produnds greater to rees and power and gusts as I	nced strong sout han 50 mph and wer lines were d nigh as 91 mph	hwest to we wind gusts owned in Pa were reporte	st winds ac as high as rk County ed near Ny	cross South Central ar 89 mph. A gust of 92 and power was lost to	ssure system which tacked eastward do southeastern Montana. Livingston 2 mph was reported 6 miles south of 5 over 1500 homes for two hours. In bunty, wind gusts as high as 68 mph tation.
MTZ028	Wheat							
	22 23	1700MST 1200MST			0	0		High Wind (G66)
	A stron	g Pacific low						high pressure over Utah to produce of 76 mph at 116 am on February 23.

		Time	Path	Path	Num	Number of		ated	February 1999
		Local/	Length	Width	Pers	sons	Dam	age	•
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm

MONTANA, West

MTZ001>004

Kootenai/Cabinet Region - West Glacier Region - Flathead/Mission Valleys - Lower Clark Fork Region

01 2000MST 0 0 Winter Storm 02 1515MST

Troy-5.5 inches new snow Stahl Peak-9 inches new snow Lookout-11 inches new snow Essex-7 inches new snow Poorman Creek-9inches new snow

Flattop Mtn-9 inches new snow Lost Trail Pass-12 inches new snow Hot Springs-47 mph wind gust Pablo Dam-63 mp wind gust Angel Point-46 mph wind gust

MTZ001>002-004-006>007-043 Kootenai/Cabinet Region - West Glacier Region - Lower Clark Fork Region - Bitterroot / Sapphire Mountains - Butte / Pintlar Region - Blackfoot Region

06 0400MST 0 0 Winter Storm

07 1530MST
Banfield Mountain-10 inches new snow
Poorman Creek-8 inches new snow
Flattop Mountain-10 inches new snow
Lookout Pass- 16 inches new snow
Hoodo Basin-14 inches new snow
North Fork Jocko-12 inches new snow
Lolo Pass-9 inches new snow

Lolo Pass-9 inches new snow Lookout Pass-53 mph wind gust Kriley Creek-51 mph wind gust Angel point-43 mph wind gust

MTZ005>006 Missoula / Bitterroot Valleys - Bitterroot / Sapphire Mountains

09 1250MST 1 0 Heavy Snow 2115MST

Conner-12 inches new snow Stevensville-8 inches new snow Hamilton-12 inches new snow

Numerous car wrecks were reported due to heavy snow and slick roads, including a fatal crash near Arlee and a seven car pileup

north of Hamilton. M49VE

MTZ001>003-006-043 $Kootenai/Cabinet\ Region - West\ Glacier\ Region - Flathead/Mission\ Valleys - Bitterroot\ /\ Sapphire\ Mountains - Blackfoot\ Region$

18 2300MST 0 0 Heavy Snow

19 0500MST

Coram-6 inches new snow Swan Lake-7 inches new snow Lookout Pass-12 inches new snow Noisy Basin-8 inches new snow Twin Lakes-9 inches new snow Stuart Mountain-7 inches new snow Lolo Pass-8 inches new snow

NEBRASKA, Central

NEZ007-010-026-028>029 Boyd - Holt - Blaine - Garfield - Wheeler

were also reported. Damage was limited to a few road signs .

11 1000CST 0 0 High Wind (G36)

1145CST
Sustained wind of 40 mph or higher was recorded on automatic observation equipment at O'Neill in Holt County. In the rest of the affected area the information was obtained from cooperative observers and anectdotal reports by the public. Gust to over 50 mph

NEZ008>010 Brown - Rock - Holt

17 0900CST 0 0 Heavy Snow 2100CST

Local twelve hour snow amounts of 6 to 9 inches were reported in southern Brown County, southern Rock County, and southwest

		Time	Path	Path	Num	Number of		ated	February 1999
		Local/	Length	Width	Per	sons	Dam	age	, , , , , , , , , , , , , , , , , , ,
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm

NEBRASKA, Central

Holt County of North Central Nebraska.

NEZ005>010-024>029-036>038-059 Cherry - Keya Paha - Boyd - Brown - Rock - Holt - Hooker - Thomas - Blaine - Loup - Garfield - Wheeler - Mcpherson - Logan - Custer - Lincoln

0

21 2300CST 23 1200CST

A major winter storm produced heavy snow and strong wind in a most of central and north central Nebraska, and parts of southwest Nebraska. Snowfall amounts were generally 6 to 8 inches with the heaviest snow in eastern Custer County, eastern Blaine County, western Loup County, extreme southeast Brown County, and extreme southwest Rock County where 10 to 12 inches fell.

0

NEBRASKA, East

NEZ011>012-015>018-030>034-042>045-050>053-065>066-078-088>089 Knox - Cedar - Thurston - Antelope - Pierce - Wayne - Boone - Madison - Stanton - Cuming - Burt - Platte - Colfax - Dodge - Washington - Butler - Saunders - Douglas - Sarpy - Seward - Lancaster - Saline - Jefferson - Gage

11 1000CST 1600CST 0 High Wind (G50)

High wind and snow abruptly brought winter weather back to residents of eastern Nebraska a day after record setting highs in the upper 60s to upper 70s were recorded. A sustained northwest wind of 35 to 40 mph with gusts to 60 mph was accompanied by snowfall of around 1 to 3 inches. This created a period of near whiteout conditions across the region. Besides the sustained winds of near 40 mph, higher wind gusts included 60 mph near Gretna, 55 mph at Norfolk, 53 mph in Fremont and 50 mph at Offutt.

NEZ031>033-042>045-051>053

Madison - Stanton - Cuming - Platte - Colfax - Dodge - Washington - Saunders - Douglas - Sarpy

18 0500CST 1900CST Winter Storm

Winter Storm

Freezing drizzle and sleet changed over to snow and quickly became heavy during the morning of 2/18/99. Snowfall of 6 to 8 inches was common across the area. Significant precipitation began near Norfolk around 500 am but didn't start in the Omaha area until around 1000 am, while the snow ended for the most part in Norfolk around 300 pm and in Omaha around 700 pm. Heavier snow totals included 8 inches in Madison, 7.5 inches at Howells and 7 inches at Arlington, West Point and Lindsay. Around 6 inches fell over much of the Omaha Metro area.

NEZ011>012-015>018-030>034-042>045-050>053-065>068-090>093 Knox - Cedar - Thurston - Antelope - Pierce - Wayne - Boone - Madison - Stanton - Cuming - Burt - Platte - Colfax - Dodge - Washington - Butler - Saunders - Douglas - Sarpy - Seward - Lancaster - Cass - Otoe - Johnson - Nemaha - Pawnee - Richardson

22 0500CST 2000CST 0 Winter Storm

A Winter storm dumped 7 to as much as 12 inches of snow over most of eastern Nebraska and western Iowa. The storm was accompanied by an east to southeast wind of 15 to 30 mph which caused some blowing and drifting of the snow and caused schools to cancel classes either all day Monday (02/22/99) or Monday afternoon as well as Tuesday. Six to 9 inches of snow was reported from Knox county southeast through Norfolk and Columbus then southeast through Lincoln to Falls City. Eight to 11 inches generally fell from Cuming county southeast through the Omaha/Council Bluffs area then south to Nebraska City. Heavier amounts in eastern Nebraska included...12 inches at Union, 11 inches in Papillion, 10 inches in Bellevue, Gretna and Prague and 9 inches at West Point, Creighton and parts of Omaha.

NEBRASKA, Extreme Northeast

NEZ013>014 Dixon - Dakota

22 0700CST 0 0 0

Heavy Snow

Snowfall of 6 to 9 inches slowed transportation. The snow also forced schools and some businesses to close early.

NEBRASKA, Extreme Southwest

NONE REPORTED.

		Time	Path	Path	Num	Number of Estim		ated	February 1999
		Local/	Length	Width	Per	sons	Dam	age	,
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm

NEBRASKA, South Central

NEZ039>041-046>049-060>064-072>077-082>087 Valley - Greeley - Nance - Sherman - Howard - Merrick - Polk - Dawson - Buffalo - Hall - Hamilton - York - Gosper - Phelps - Kearney - Adams - Clay - Fillmore - Furnas - Harlan - Franklin - Webster - Nuckolls - Thayer

10 1800CST 0 4 35K 0 Winter Storm 11 2300CST

After enjoying record warmth, a sharp and fast moving cold front brought wind driven snow and plummeting temperatures to south-central Nebraska. Up to three inches of snow along with wind gusts over 50 mph caused near "whiteout" conditions. Aurora and Lexington both recorded wind gusts of 52 mph at the height of the storm. Numerous schools were closed across the region.

The slick roads and poor visibility were to blame, in part, for several accidents across the region. A tractor-trailer truck rear ended two vehicles three miles north of Hebron resulting in one minor injury. Both vehicles were totaled. A van was overturned just east of Kearney on Interstate 80 causing two injuries. One more vehicle slid into the ditch just south of Minden resulting in one minor injury.

NEZ039>041-046>049-060>064-073-075>077-085>087 Valley - Greeley - Nance - Sherman - Howard - Merrick - Polk - Dawson - Buffalo - Hall - Hamilton - York - Phelps - Adams - Clay - Fillmore - Webster - Nuckolls - Thayer

22 0400CST 0 0 0 0 Winter Storm 2350CST

One of the more widespread and heavy snowfall events blanketed a portion of south-central Nebraska with up to ten inches of snow. The snow began falling before sunrise and didn't stop until around midnight that evening. By the storms end, ten inches of snow was reported in the Greeley area, 8 inches in Ord with widespread 4 to 8 inch amounts north and east of the Grand Island area. Fortunately, significant wind was not a problem during this event, but most schools in the heavier snow areas canceled classes or closed early nonetheless.

NEBRASKA, West

NEZ055

Cheyenne

10 1350MST 0 0 5K 0 High Wind (G36)

Strong winds overturned a semi tractor-trailer which was westbound on Interstate 80 west of Sidney.

NEVADA, North

NVZ008>009

Southwest And South Central Elko - Southeast Elko

04 1800PST 0 0 Heavy Snow

05 0200PST

Four inches of new snow was reported at Wells and Spring Creek.

NVZ007>009-011>012

NVZ008>009-011

Northern Elko - Southwest And South Central Elko - Southeast Elko - White Pine - Lander/Eureka

09 1300PST

10 0400PST Southwest And South Central Elko - Southeast Elko - White Pine

09 1321PST 0 0 8K High Wind (G58)

0

1835PST

A strong storm system brought high winds and heavy snow to much of northern and east central Nevada. Some reported wind gusts were: 67 mph at Wells, 62 mph at both Elko and Spring Creek, 56 mph at Ely, and 54 mph at Winnemucca. Several large trees were blown down in Elko and Ely. The Toki-Ona restaurant in Elko had damage to its sign and the Pizza Hut in Ely had roof damage.

Heavy Snow

Heavy snowfall was also reported across portions of northern and east central Nevada. Some amounts included: 8 inches at Wild Horse, 7 inches at Eureka, 6 inches at Ely and Lamoille, and 3-4 inches between Elko and Wendover.

NVZ011 White Pine

09 1800PST 0 0 3K High Wind

Strong winds in McGill and Ely caused some roof damage and blew out some windows in Ely.

NVZ007>008 Northern Elko - Southwest And South Central Elko

21 0600PST 0 0 Heavy Snow

3-4 inches of snow was reported at Tuscarora and Wild Horse.

	Time Path Path Number of Local/ Length Width Persons	Estimated Damage		February 1999					
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm
NEVADA, South									
NVZ014	Esme	raldo/Centi	al Nve						
1112011	09	1202PST	1 1 1 1		0	0			High Wind (G53)
			ds associated	with a low pres			oss central N	evada. T	he Esmeralda County Sheriff reported
	a wind	d gust to 61 m	ph. No damag	ge was reported					
NEVADA, West	~								
NVZ002		ter Lake Ta	hoe Area						
	06 10	0515PST 0515PST			0	0	0		Heavy Snow
			6-8 feet of sno	ow at Mt. Rose	Ski Area.				
NVZ002	•	ter Lake Ta							
	06	0630PST			0	0	0		Heavy Snow
	07	0630PST							·
NY 17 000				s at Diamond P	eak Ski Area	ì.			
NVZ002		ter Lake Ta	noe Area						
	06 07	1046PST 1046PST			0	0	0		Heavy Snow
			of 24 inches ne	ar Incline Villa	ge, elevation	1 7000 feet	t.		
NVZ003	Grea	ter Reno/Ca	rson City/N	Iinden Area					
	06	1100PST			0	0	50K		High Wind
		2000PST			D 'C' O	•			1 : d B
									ds in the Reno area on 2/6/99. Many The highest wind gust recorded was
	_	ph in south R	•	poles blown o	ci, roois da	magea, am	a renees oro	vii dowii.	The ingliest wind gust recorded was
NVZ003	Grea	ter Reno/Ca	arson City/N	Iinden Area					
	06	1146PST			0	0	0		High Wind (G50)
		-	•	d 6 miles north	east of Gard	nerville.			
NVZ003	Grea	ter Reno/Ca	arson City/N	Iinden Area					
	06	1200PST			0	0	100K		High Wind
	Carso	1800PST n City fire d	epartment and	d media report	s of major	wind dan	nage through	out the	Carson City area. Roof damage to
	hotel-	casino as well	l as many reta	ul stores. Nur	nerous trees	and powe	r poles blow	n down o	causing widespread phone and power
	_	-			_	tely destro	yed. Rainfa	ll that fol	llowed the winds was responsible for
NVZ003		-		vith roof damag Iinden Area	ge.				
14 4 22003	06	1201PST	ii soii City/iv	illiucii Ai ca	0	0	0		High Wind (G53)
			1 mph recorde	d 6 miles north			U		riigii Wiliu (G55)
NVZ003		-	-	Iinden Area					
	06	1258PST	•		0	0	0		High Wind (G71)
		1331PST							
NIX/7002			_	h recorded in s	outh Reno.				
NVZ003			irson City/N	Iinden Area					
	06 Peak v	1300PST	4 mnh with su	stained winds 5	0 50-55 mph re	0 ecorded 11	miles south	of Reno	High Wind (G64)
NVZ003		-	-	Iinden Area	•	corded 11	miles south	or Reno.	
1112000	06	1415PST	irson City	11114011 111 04	0	0	0		High Wind (G74)
			5 mph recorde	d in southwest		v	v		ingii Willia (G74)
NVZ003	Grea	ter Reno/Ca	rson City/N	Iinden Area					
	06	1418PST			0	0	0		High Wind (G91)
		-	_	led in south Re					
NVZ003	Grea		rson City/N	Iinden Area					
	06	1435PST	0 1 .	1	0	0	0		High Wind (G78)
NIV/7002		-	_	d in southwest					
NVZ003			irson City/N	Iinden Area			===		H. 1 M. 1 (CG2)
	06	1450PST			0	0	5K		High Wind (G83)

		Time	Path	Path		ber of	Estim		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per: Killed	sons Injured	Dam Property	age Crops	Character of Storm
NEVADA, West			()	(,		J	11.5		
NEVADA, West		wind gust of s		ded in south Rei	no. Trees	down onto	power lines	, flying o	lebris including shingles blown off of
NVZ003	Grea	ter Reno/Ca	arson City/N	Iinden Area					
	06	1455PST	0 1 11		0	0	0	ъ	High Wind (G80)
NVZ003		-	_	stained winds of Inden Area	50-60 mph	recorded	ın southwest	Reno.	
11 1 2003	06	1500PST	ii soii City/iv	illideli Area	0	0	0		High Wind (C00)
			04 mph record	led in south Ren		U	U		High Wind (G90)
NVZ001		ral/Souther							
	06	1525PST			0	0	0		High Wind (G70)
			-	th gusts to 80 mp	h recorded	in Smith V	Valley.		
NVZ004			Basin And	Range					
	06 Peak	1530PST	3 mph with ou	stained winds 30	0) 40 mph re	0 corded in	0 Stagecoach		High Wind (G55)
NVZ003		-	-	Ainden Area	7-40 mpn re	corded iii	Stagecoacii.		
1112003	06	1615PST	irson City/iv	Inden Area	0	0	0		High Wind (G65)
			5 mph with nu	imerous other gu	-			t Stead.	ingh wind (G03)
NVZ003	Grea	ter Reno/Ca	arson City/N	Iinden Area					
	06	1630PST			0	0	0		High Wind (G52)
		-	-	ed by Nevada De	pt. of Trans	sportation a	automated w	eather sei	nsor.
NVZ002		ter Lake Ta	hoe Area						
	06 07	1700PST 1700PST			0	0	0		Heavy Snow
			of 12 inches at	Incline Village,	elevation 6	500 feet.			
NVZ002	Grea	ter Lake Ta	hoe Area						
	06	1700PST			0	0	0		Heavy Snow
	07 24 ho	1700PST	of 22 inches at	Dagget Pass, ele	evation 738	() feet			
NVZ003				Inden Area	vation 750	o rect.			
	06	1725PST			0	0	5K		High Wind
	Law e	enforcement re	port of travel t	trailer blown ove	r with perso	ons tempor	arily trapped	l inside n	ear Cold Springs, north of Reno.
NVZ003	Grea	ter Reno/Ca	arson City/N	Iinden Area					
	06	1743PST			0	0	0		High Wind (G132)
NIX/7002		-	_	led atop Virginia	Peak by N	WS Alert	wind sensor.		
NVZ003			irson City/N	Ainden Area	0	0	217		TT: -1. XX/: J
	06 3 pow	2020PST er poles blow	n over on Red	Rock Road near	0 Stead.	0	3K		High Wind
NVZ001	•	ral/Souther							
	07	1930PST	-		0	0	15K		High Wind (G58)
							Highway 95	near Wa	alker Lake. Winds gusting to 67 mph
NIX/7001				ween Hawthorne	and Schurz	Z.			
NVZ001	07	ral/Souther 2100PST	n Lyon		0	0	2K		High Wind (C52)
			25-40 mph gus	sting to 60 mph i	-			poles blo	High Wind (G52) own over.
NVZ003				Inden Area		. 1	•	•	
	09	0540PST			0	0	0		Heavy Snow
	C+	1740PST	of a	1 magands 4.5 m 12	va aanel Ce	Compos: C':	v alav	4700 f- · ·	
NVZ001		ral/Souther		l recorded 5 mile	es south of (Carson Cit	y, elevation	+/UU Ieet.	
14 4 27001	09	1220PST	п Дуон		0	0	0		High Wind (C68)
			8 mph recorde	d at Walker Lak		U	U		High Wind (G68)
NVZ001		ral/Souther							
	09	1255PST			0	0	0		High Wind (G73)
	Peak	wind gust of 8	4 mph recorde	d at Walker Lak	e.				

	Time Path Path Number of Local/ Length Width Persons		Estimated	February 1999				
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Fers Killed	ons Injured	Damage Property Crops	Character of Storm
NEVADA, West								
NVZ001	Mine	ral/Souther	n Lyon					
	Highv							High Wind (G74) semi truck-trailer was blown over on peed the anemometer could read. No
NVZ003	Grea	ter Reno/Ca	arson City/N	Iinden Area				
		-	•	ed 6 miles NE o	0 f Gardnervill	0 e.	0	High Wind (G55)
NVZ003			arson City/N	Iinden Area				
	18 Peak	0913PST	3 mph recorde	d in Washoe Va	0	0	0	High Wind (G55)
NVZ004		•	Basin And		illey.			
1112001	18	1100PST 1600PST	2002 12		0	0	50K	High Wind (G60)
	histor	•	_		-	-		and blew roofs off of structures. A ecorded in the immediate area was 69
NVZ003	_	-	arson City/N	Iinden Area				
	18 Peak	1103PST wind gust of 6	0 knots record	ed at the NWSI	0 FO Reno.	0	0	High Wind (G60)
NVZ003	Grea	ter Reno/Ca	arson City/N	Iinden Area				
	18 Peak	1150PST wind gust of 6	5 mph recorde	ed at Virginia Fo	0 oothills.	0	0	High Wind (G56)
NVZ003	Grea	ter Reno/Ca	arson City/N	Iinden Area				
		-	•	ed in south Reno	0	0	0	High Wind (G75)
NVZ001	Mine	ral/Souther	n Lyon					
	18	1340PST	T 1 11		0	1	30K	High Wind
NVZ003	_			over a pickup tri Iinden Area	ick pulling a	30 100t tra	avel trailer on Highwa	19 95.
1112003	18	1520PST	irson City/i	illiuch Arca	0	0	5K	High Wind (G78)
			0 mph in soutl	nwest Reno. Fe	•			ingii Willu (G76)
NVZ002	Grea	ter Lake Ta	hoe Area					
	20 21	1600PST 0515PST	ry in 12 hours	at Mt. Rose Ski	0	0	0	Heavy Snow
NVZ002		ter Lake Ta		at wit. Kuse Ski	Aita.			
	20 21 12-18	1800PST 0615PST inches of sno	w in 12 hours	at Diamond Pea	0 ak Ski Area.	0	0	Heavy Snow
NEW HAMPSHIR	<u>E, Nort</u> l	<u>n and Cen</u> t	<u>tral</u>					

NOT RECEIVED.

NEW HAMPSHIRE, Southern

NONE REPORTED.

NEW JERSEY, Northeast

NONE REPORTED.

		Time	Path	Path	Num	ber of	Estimated		February 1	999
		Local/	Length	Width	Per	rsons	Dam	age	3	
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

NEW JERSEY, South and Northwest

NJZ001-007>010-012>026 Sussex - Warren - Morris - Hunterdon - Somerset - Middlesex - Western Monmouth - Eastern Monmouth - Mercer - Salem - Gloucester - Camden - Burlington - Western Ocean - Cumberland - Western Atlantic - Western Cape May - Eastern Cape May - Eastern Atlantic - Eastern Ocean

on onner

02 2359EST

The combination of the recent heavy precipitation during January and the mild temperatures that allowed water to soak into the soil and raise ground water levels permitted the Delaware River Basin Commission (DRBC) on February 2nd to lift their drought warning. Concurrently the New Jersey State Department of Environmental Protection lifted its drought warning for seven northern counties (not covered by the DRBC declaration) in the state including Morris and Somerset Counties. The water level in the thirteen reservoirs in the northern part of the state has risen from 44 to 74 percent of capacity as of February 2nd. On the heels of the third wettest January on record for the state, February's monthly precipitation total on a county weighted average was a few tenths of an inch (or about 85% of normal) below normal.

NJZ001-007>008

Sussex - Warren - Morris

01 2100EST 02 0400EST

0400EST

A low pressure system developed along the Gulf Coast the morning of February 1st. A broad southwest flow preceding the low brought warmer air aloft and precipitation into the Middle Atlantic States. A high pressure system that retreated from New Jersey into the Canadian Maritimes on the morning of the 2nd kept enough cold air near the ground for precipitation to start as freezing rain in sections of Warren and Morris Counties and most of Sussex County the evening of the 1st. The low tracked northeast along the coastal plain and brought in milder air that raised temperatures above the freezing mark in all areas by the morning of the 2nd. Precipitation was light and intermittent during the evening of the 1st and became steadier after midnight. Temperatures rose above the freezing mark before the heavier rain moved north. Around one tenth of an inch of ice accrued on exposed surfaces before the change to plain rain. Untreated roadways and walkways were treacherous.

NJZ001

Sussex

07 1500EST 08 0500EST 0 0 Snow

Drought

Freezing Rain

Snow fell over Northwest New Jersey from Sunday afternoon the 7th into the early Monday morning on the 8th. Accumulations in Sussex County averaged around three inches. Accumulations across Warren, Morris, Northern Hunterdon and Northern Somerset Counties averaged around two inches. The snow fell at a fairly consistent rate. This combined with the heaviest precipitation occurring on a Sunday night reduced the number of accidents. Flurries lingered into the morning of the 8th, but the steady snow was over well before the morning commute. Across most of the northwest part of the state the snow mixed with or changed to rain during the evening of the 7th. Accumulations included 3.5 inches in Sussex (Sussex County), 3.2 inches in Montague (Sussex County), 3 inches in Wantage (Sussex County), 2.2 inches in Stewartsville (Warren County), 2 inches in Newton (Sussex County), Flemington (Hunterdon County) and Long Valley (Morris County) and 1.8 inches in Somerville (Somerset County).

A low pressure system was located in the central Ohio Valley the morning of the 7th. A second low formed along the primary low's warm frontal boundary in North Carolina the evening of the 7th. This low became the main low and quickly moved offshore on the 8th. By 7 a.m. EST on the 8th, the low was already about 275 statute miles east of Fenwick Island, Delaware. The fast track moved precipitation in and out of the area quickly and prevented heavy snow from occurring.

Camden County

Cherry Hill

12 1825EST 0.5 40 0 0 100K 0 Tornado (F1)

A squall line of strong to locally severe thunderstorms spawned a weak tornado (F1 on the Fujita Scale) as it moved through southeastern Cherry Hill. The tornado briefly touched down in the Kate Court and Partridge Lane area and caused major damage to one house and moderate damage to about 12 other homes. Several sheds were destroyed. There was also considerable shingle and siding damage. One screened in porch was destroyed. Some of the damage was caused by airborne missiles which fell onto roofs and embedded into the ground. This included pieces of a stockade fence. The tornado's path length was estimated at 0.5 miles. Its path width was about 40 yards. Damage was estimated at \$100,000. No serious injuries were reported. An unseasonably warm air mass and a strong cold front conspired to produce the tornado. Preceding the tornado, high temperatures soared to record breaking levels at both the Philadelphia (70 degrees, previous record 61 degrees set in 1898) and Atlantic City (62 degrees, previous record 61 degrees set in 1951) International Airports.

Cumberland County

Newport 12 1828EST 0 0 0 Thunderstorm Wind (G53)

NEW MEXICO, Central and North

NMZ017 Capitan/Northern Sacramento Mountains

Sierra Blanca Airport near Ruidoso reported a peak wind of 63 mph during a period of high winds that lasted about 3 hours.

		Time	Path	Path	Num	ber of	Estimated		February 19	99
		Local/	Length	Width	Per	rsons	Dam	age		
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

NEW MEXICO, Central and North

NMZ004>005-008>011-016>017 Sangre De Cristo Mountains - Northeast Highlands - Westcentral Mountains - Middle Rio Grande Valley - Sandia/Manzano Mountains - Central High Plains/Estancia Valley County - Lincoln County High Plains/Hondo Valley - Capitan/Northern Sacramento Mountains

10 1500MST 0 0 20K High Wind (G55) 1730MST

Gusty winds developed across central New Mexico as an upper trough swept eastward over the state. Gusts of 50 to 55 mph were reported from Gallup and Grants into Albuquerque. Winds of 60 to 70 mph whipped over the ridges of the central mountain chain stretching from Raton south to Ruidoso then sped downslope at 50 to 60 mph into the adjacent eastern highlands. Several small plains were damaged by gusty winds at the Angel Fire Airport in Colfax County.

NEW MEXICO, South Central and Southwest

NONE REPORTED.

NEW MEXICO, Southeast

NMZ027>029

Guadalupe Mountains Of Eddy County - Eddy County Plains - Lea

01 0000MST 0 0 Drought 28 2359MST

The drought continued across Southeast New Mexico in February with nearly all stations in the area receiving less than one-tenth of an inch of precipitation. The vast majority of these locations reported no measurable precipitation at all. The 0.00 inch of precipitation observed at the Midland International Airport was only the second February on record with no precipitation, with the other occurrence being in 1947.

NEW YORK, Central

NYZ023>024

Schuyler - Chemung

14 0200EST 0 0 Heavy Snow 0800EST

A narrow band of lake enhanced snowfall affected areas downwind of Seneca Lake in central Schuyler and northern Chemung counties. Northerly winds well aligned with the long axis of the lake and the passage of an upper level disturbance helped to kick off the locally heavy snowfall.

Accumulations generally ranged from 4 to 8 inches within this band. The highest totals were found on the south end of Seneca Lake and also across some of the hilltop areas just east and northeast of this area. Burdett in Schuyler county had the greatest tally with 8 inches, while 3 to 5 inch amounts were common just north of Horseheads in Chemung county.

NEW YORK, Coastal

NYZ079>081

Northeast Suffolk - Southwest Suffolk - Southeast Suffolk

25 1020EST 0 0 Heavy Snow 26 0500EST

With a cold high pressure system covering New England, as a strong low pressure system passed east of Long Island, it produced heavy snow.

Light snow began around 11 pm on February 24th near Montauk and became heavier as it slowly spread west across Suffolk County. The heaviest snow fell across the south fork. Snowfall amounts ranged from 6 inches at Patchogue to 13.5 inches at Montauk. A spotter from East Hampton measured 10 inches.

NEW YORK, East

NYZ041>043-048>054-058>061-063>066 Northern Saratoga - Warren - Washington - Western Schenectady - Eastern Schenectady - Southern Saratoga - Western Albany - Eastern Albany - Western Rensselaer - Eastern Rensselaer - Western Greene - Eastern Greene - Western Columbia - Eastern Columbia - Western Ulster - Eastern Ulster - Western Dutchess - Eastern Dutchess

25 2000EST 0 0 Snow 26 0100EST

The outer fringe of precipitation associated with a powerful storm off Cape Cod, brought snow to eastern New York on the evening of Febuary 25. While snowfall amounts generally ranged only from one to three inches, moderate snow fell at the height of the evening commute. This resulted in numerous vehicular accidents and significant traffic delays, especially in the Capital region.

NYZ041-050 Northern Saratoga - Southern Saratoga

28 1700EST 0 0 Wintry Mix 2300EST

NYZ043 Washington

28 1700EST 0 0 Winter Mix 2300EST

Storm Data and Unusual Weather Phenomena Number of Time Path Path Estimated February 1999 Local/ Length Width Persons Damage Character of Storm Standard (Miles) (Yards) Killed Injured Property Crops **NEW YORK, East** A wintry mix of rain sleet and snow produced very slick road conditions on the afternoon of February 28 across the Lake George Saratoga region. There were at least 60 weather related accidents between Exit 16 and 24 of the Adirondack Northway. There were many other vehicular accidents on various highways and smaller roadways. One accident on Route 4 in Fort Anne Washington county proved fatal. **NEW YORK, North** NONE REPORTED. **NEW YORK, West** NYZ008 Lewis 0740EST **Heavy Snow** A general snowfall of three to six inches fell across the north country. Lake effect and orographic enhancement resulted in higher snowfall amounts over the Tug Hill Plateau. Snowfalls of seven to eleven inches were reported on the plateau. **NORTH CAROLINA, Central** Wayne County Goldsboro 12 1845EST 0 Hail (1.00) A thunderstorm became severe as it moved over the Goldsboro/Seymour Johnson Air Force Base producing 1 inch hail and a wind gust of 60 mph. Several 8 inch diameter trees were blown down. Winds of 60 mph were also reported in Dudley where trees were also downed. **Wayne County** Goldsboro 1500EST 0 0 45K Lightning Lightning struck a house on Creekside Drive. No injuries were reported in the fire that began in the attic. Twenty-two firefighters took 2 hours to put out the blaze. **Cumberland County** Wade 20K Thunderstorm Wind (G50) Two houses sustained major roof damage and another house had minor damage as strong thunderstorm winds hit the small community off I-95. Three storage buildings were also destroyed. NORTH CAROLINA Central Coastal **Onslow County** 2154EST Hail (0.75) Verona to 0 2225EST Camp Lejeune Dime size hail was reported by a 911 operator in the southwestern portion of Onslow county. Nickel size hail was also reported at Brown's Mobile Home Park. **NORTH CAROLINA** Extreme Southwest NONE REPORTED. NORTH CAROLINA, North Coastal Northampton County Hail (0.75) Conway 28 1505EST 0 **Hertford County** Murfreesboro 28 1515EST 0 Hail (0.75) NORTH CAROLINA **Northwest and North Central**

NCZ001>002-018-

Ashe - Alleghany - Watauga

018

01 0030EST Winter Storm 2345EST

Snow and sleet overspread northwestern North Carolina during the early morning hours of the 1st. Snow accumulations of up to 2 inches occurred before changing to sleet and freezing rain. Freezing rain accumulated 1/4 inch to 1/2 inch, downing some trees and tree limbs, before changing to light rain and drizzle during the afternoon and evening.

NCZ001>002-018>019

Ashe - Alleghany - Watauga - Wilkes

1030EST 19 2200EST

0 0 **Heavy Snow**

Mixed rain and snow developed over northwestern North Carolina early in the morning of the 19th and changed to all snow by late

		Time	Path	Path	Num	ber of	Estimated		February 1	999
		Local/	Length	Width	Per	rsons	Dam	age	3	
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

NORTH CAROLINA, Northwest and North Central

in the morning. Snow accumulated 4 to 7 inches, in Alleghany, Ashe, and Watauga counties, before tapering off and ending toward evening. In Wilkes County, accumulations of 4 to 7 inches occurred at elevations above 2000 feet with 1 to 3 inches elsewhere. Several automobile accidents occurred during the afternoon due to snow covered roads.

Columbus County						
Bolton	19	1505EST 1510EST	0	0		Hail (0.75)
New Hanover County						
Wilmington	19	1615EST 1620EST	0	0		Hail (1.00)
	Hail re	eported on Shipyard Blvd and Sout	th College Rd.			
Pender County						
Burgaw	19	1630EST	0	0		Hail (0.75)
Pender County						
Willard	28	1457EST	0	0		Hail (1.00)
Robeson County						
Rowland	28	1510EST 1512EST	0	0		Hail (1.00)
Pender County						
Burgaw	28	1515EST 1520EST	0	0		Hail (0.75)
Robeson County						
Fairmont	28	1535EST	0	0		Hail (0.75)
NORTH CAROLIN	A, Sou	<u>thwest</u>				
NCZ049	Yanc	ey				
	01	0000EST 0600EST	0	0		Snow And Ice
	Snow a	and ice covered roads contributed	to numerous auto acc	idents early	y on the 1st. One	accident was fatal (indirect).
NCZ034>037- 054>057-066>070		well - Alexander - Iredell - D Lland - Lincoln - Gaston	avie - Mcdowell -	Burke -	Catawba - Ro	wan - Polk - Rutherford -
	01	0000EST 0600EST	0	0		Freezing Rain
						ezing rain during the early morning houp to 1/8th inch and mainly on trees.
NCZ037-057	Davie	e - Rowan				
	12	1600EST 1700EST	0	0	5K	Gusty Winds
	Gusty house.	gradient winds along and just ahe	ead of a cold front gu	usted unof	ficially to 55 mp	h and caused at least one tree to fall o
NCZ033-049>051	Avery	y - Yancey - Mitchell - Swain	1			
	13	0700EST 1400EST	0	0		Heavy Snow
	accum combin	ulated between 3 and 5 inches, we ned to produce below zero wind ch	vith heaviest amounts nills.	s falling al	pove 3000 feet.	lina mountains bordering Tennessee. Sn Also, cold temperatures and strong win
NCZ034-048- 053>055-058>059	Caldy	well - Madison - Buncombe -	Mcdowell - Burk	e - Graha	am - Northern	Jackson
	13	0800EST	0	0		Snow

combined to produce near zero wind chills for much of the day.

the high elevations of some of the foothills. Accumulations ranged between 1 and 3 inches. Cold temperatures and strong winds

		Time	Path	Path	Num	iber of	Estim	ated	F	February 1999
		Local/	Length	Width	Per	rsons	Damage			
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

NORTH CAROLINA, Southwest

NCZ033

Avery

1200EST 19 1800EST 0 0 **Heavy Snow**

A surface low moving across Georgia and South Carolina, and an upper level system moving across North Carolina, combined to produce heavy snow across Avery county. By late afternoon, 3 to 6 inch accumulations were common at low elevations, with 6 to 12 inches at the higher elevations.

NCZ034>037-049>050-054>057-067>072

Caldwell - Alexander - Iredell - Davie - Yancey - Mitchell - Mcdowell - Burke - Catawba - Rowan -

Rutherford - Cleveland - Lincoln - Gaston - Mecklenburg - Cabarrus

19 1200EST 1800EST

Snow

A surface low moving across central Georgia and South Carolina combined with a strong upper level system to produce light snow across much of western North Carolina during the afternoon. Most accumulations were between 1 and 2 inches. Although there was a band of 3 inch accumulations stretching from the northern mountains, southeast through Morganton and to Shelby. Also, some isolated accumulations of around 8 inches were reported from the very highest peaks in the northern mountains.

NCZ033-048>052

Avery - Madison - Yancey - Mitchell - Swain - Haywood

2200EST 0300EST 20

A moist northwest flow once again brought light snow and snow showers to the counties bordering Tennessee. Accumulations overnight were around one inch, with up to 3 inches at high elevations.

NCZ034-049>050-053>055-064

Caldwell - Yancey - Mitchell - Buncombe - Mcdowell - Burke - Transylvania

1700EST

An upper level disturbance brought just enough moisture and lift across western North Carolina to produce light snow across portions of the area. Accumulations were generally between 1 and 2 inches, although Little Switzerland reported 3 to 4 inches. Hundreds of traffic accidents occurred, with some injuries resulting, as conditions rapidly deteriorated and became slick in a span of 20 minutes. Interstate 40 was blocked for a while due to several multi-car pile-ups.

NCZ034>037-048>053-056>059-063-069

Caldwell - Alexander - Iredell - Davie - Madison - Yancey - Mitchell - Swain - Haywood - Buncombe -

Catawba - Rowan - Graham - Northern Jackson - Southern Jackson - Lincoln

0000EST 24 0600EST

Snow

Weakening surface low pressure moving into the Ohio and Tennessee Valleys spread light snow east across western North Carolina early on the 24th. Most counties received between a dusting and one inch. However, there was one band of 2 to 3 inch accumulations that stretched from the central part of the mountains across the foothills and into the piedmont near Statesville. Numerous traffic accidents occurred even where only 1/2 inch of snow accumulated.

NCZ033-048>050

Avery - Madison - Yancey - Mitchell

1400EST

Snow

A strong northwest flow into the northern mountains produced 1 to 3 inches of snow accumulation. Some of the highest peaks received 4 to 5 inches. The snow continued until shortly after sunrise on the 1st of March. Frequent gusts to 40 mph occurred at the same time and continued well into the afternoon of the next day. However, no damage was reported.

NORTH DAKOTA, Central and West

NDZ025

Foster

Heavy Snow

Low pressure over South Dakota brought a narrow band of heavy snow over east central North Dakota.

The city of Carrington in Foster county received 5 to 7 inches of snow in a 7 hour period.

NDZ034 Morton

0 0 Flood

Blizzard

The Cannonball River in south central North Dakota at Breien rose to 15 feet which was 5 feet above flood stage. The flooding was caused by an ice jam. Flooding of low land areas occurred.

NORTH DAKOTA, East

NDZ008-016-027

Pembina - Walsh - Grand Forks

0300CST 0 12 0

1100CST

A strong north wind, behind a low pressure area over the western Great Lakes, produced ground blizzard conditions across the

		Time	Path	Path		ber of	Estimated	February 199
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Pers Killed	sons Iniured	Damage Property Cro	Cl. CC.
		Standard	(Mines)	(Tarus)	renicu	mjurea	Troperty Cre	3 p. 3
NORTH DAKOTA.		ern Red River	Valley during	the early morni	ng hours A	neak win	d speed of 51 mpl	h was reported by the Hallock, Minnesot
								s were reported, especially along Interstat
			s north to the	Canadian borde	r.			
NDZ024	Eddy							
	22	1000CST 2200CST			0	0		Heavy Snow
	An inv	verted trough s		tern North Dak	ota, helping t	to create a	thin band of heav	y snow. New Rockford reported 8 inche
OHIO, East								
	NON	E REPORTED).					
OHIO, North								
OHZ017-027	Hanc	ock - Wyan	dot					
	12	0000EST 0100EST			0	0	10K	High Wind (G50)
			-	rees were down recorded at Fin		-	-	rant sign was downed in Upper Sandusk
OHZ011>014-023	Cuya	ihoga - Lake	e - Geauga -	Ashtabula -	Trumbull			
	12	1700EST			0	0		Heavy Snow
	warm		of weeks of					inches at the lakeshore. The ground wa roads and sidewalks, which lessened th
OHIO, Northwest	mpae	or and shown	•••					
	NON	E REPORTED)					
OHIO, Southeast	NON	L KLI OKTLL	, .					
OHZ066>067- 075>076-083>087	Perry	y - Morgan -	- Athens - W	Vashington -	Jackson - `	Vinton -	Meigs - Gallia	- Lawrence
	11	1200EST			0	0		Record Warmth
	Aftern	1700EST	ires soared w	ell into the 70c	across south	neast Ohio	Reverly Gallin	olis, and South Point all saw 77 degree
		-						ew Lexington observed 73 degrees.
OHZ066>067- 075>076-083>087	Perry	y - Morgan -	- Athens - W	Vashington -	Jackson - `	Vinton -	Meigs - Gallia	- Lawrence
	12	1000EST			0	0		Snow
			now fell in the	wake of a cold	frontal pass	age. This	occurred less than	24 hours after temperatures were well up
OHIO, Southwest Preble County	in the	70S.						
Eaton	11	2300EST			0	0	3K	Thunderstorm Wind (G50)
Daton		2305EST and power pol	les were knocl	zed down	v	v	JI	Thunderstorm Wind (020)
Darke County	11003	a porrei por	ore knoch					
Pitsburg	11	2313EST 2315EST			0	0	10K	Thunderstorm Wind (G50)
	A bar		own by the th	understorm win	ds.			
Hardin County			-					
Kenton	11	2315EST			0	0	10K	Thunderstorm Wind (G50)

2345EST
Trees knocked down in several locations across the county.

2330EST

11

Miami County Countywide

0

5K

Thunderstorm Wind (G50)

Storms knocked a roof off a house, knocked trees down, and caused damage at the county fair.

		Time	Path	Path		iber of	Estimated Damage		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Killed	rsons Injured	Property	Crops	Character of Storm
OHIO, Southwest									
Shelby County									
Sidney	11	2330EST 2335EST			0	0	3K		Thunderstorm Wind (G50)
Croone County	Trees	knocked dowr	1.						
Greene County	11	2246EST			0	0			There de note and Wind (C50)
Wright-Patterson Afb	11 A 68 1	2346EST mph wind gust	was recorded	l.	0	0			Thunderstorm Wind (G59)
Champaign County									
2 W Urbana		0005EST 0010EST rous trees kno		Dhio Valley dur	0	0 v morning	3K hours of the	e 12th Δ	Thunderstorm Wind (G50) thead of the front, an area of storms
				Iiami Valley ca			nours or th	c 12ui. 7	inead of the front, an area of storms
Darke County									
Countywide	27	2100EST 2300EST			0	0			Flood
		econd batch of I due to the hig		II in 6 hours cai	used water t	o flood act	oss a few ro	oads in the	county. Miller and Auld roads were
OKLAHOMA, Easte			,						
OKZ060	Tulsa	ı							
	01	0000CST 0200CST			0	0			Flood
	at 7 P	M on January		ove its flood staging back below	_		•		wer then crested at a stage of 22.2 feet
OKZ073	Pittsl	U							
	06	0000CST 2359CST			0	0			Record Warmth
	The h	igh temperatur	re of 71 degre	es Fahrenheit at	the McAles	ster Region	al Airport o	n this day	broke the record high temperature for
Okfuskee County									
Central Portion	06	1600CST 1800CST			0	0			Flash Flood
Muskagas Countr	Water	covered sever	al county roa	ds to a depth of	2-4 feet.				
Muskogee County North Portion	06	1620CCT			0	0			Florik Florid
North Portion	06 Severa	1630CST 1800CST al streets arour	nd Haskell and	l Muskogee wer	e closed for	a short tin	ne by high w	ater.	Flash Flood
Cherokee County									
7 N Tahlequah	06 Severa	1700CST al 6-inch diam	eter tree sappl	ings were blow	0 n down.	0	0.10K		Thunderstorm Wind
Adair County									
Christie	06 Severa	1725CST al tree limbs w	ere blown do	wn.	0	0	0.10K		Thunderstorm Wind
Adair County									
Baron	06 Severa	1730CST al 3-4" tree lim	nbs were blow	n out of trees.	0	0	0.10K		Thunderstorm Wind
Adair County									
4 N Westville	06 Severa	1730CST al trees were b	lown down be	etween Westville	0 e and Watts	. 0	0.20K		Thunderstorm Wind
Delaware County									
South Portion	06	1730CST 1900CST		26.6	0	0	(D)	a ·	Flash Flood
Maintagh County	Severa	aı county road:	s were under 2	2-3 feet of water	n the sout	nern portio	n of Delawa	re County.	
Mcintosh County Raiford	06	1746CST			0	0			Thunderstorm Wind (G52)

		Time	Path	Path		iber of	Estimated Damage		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per Killed	rsons Injured	Property	age Crops	Character of Storm
OKLAHOMA, Eas	tern								
Pittsburg County									
Ashland	06 Sever	1810CST ral large trees v		er.	0	0	0.20K		Thunderstorm Wind
Pittsburg County									
1 N Kiowa	06 Three	1820CST tractor trailers		over on US Hw	0 y 69.	0	30K		Thunderstorm Wind
Pittsburg County									
Quinton	06 Sever	1820CST ral tree limbs w		wn by 60 mph	winds.	0			Thunderstorm Wind (G52)
Haskell County									
3 WNW Stigler		1835CST Oklahoma mes on by the wind.	onet site near	Stigler measur	0 ed a 60 mph	0 wind gus	st. Calls to th	ne area yio	Thunderstorm Wind (G52) elded only reports of small tree limbs
Latimer County		·							
Damon	power perma blown	r lines caused anent homes ir n off the roof,	n winds uproo a loss of poven the Damon V an air condition	wer to areas so Valley area abo	outh of Wilb out 5 miles so overturned, a	urton. Thouth of Wand falling	nere was substilburton. At trees destroy	stantial da the home ed two bo	Thunderstorm Wind tbuildings, and power lines. Snapped mage to two mobile homes and two with the most damage, shingles were ats and two pickup trucks. Most other wn down.
Latimer County									
Yanush		1918CST ge tree was bloon Sardis Lak	own over and	the skirting w	0 as blown off	0 f of a mot	1.5K bile home nea	ar Yanush	Thunderstorm Wind . The windows were blown out of a
Latimer County									
7 S Bengal	06 Many	1920CST		ı down.	0	0	0.20K		Thunderstorm Wind
Le Flore County									
Talihina	06	1920CST			0	0			Thunderstorm Wind (G61)
Le Flore County									
Fanshawe	06 A doc	1923CST or was blown o		t.	0	0	0.50K		Thunderstorm Wind
Choctaw County									
Ft Towson	06 There	2020CST were a few 4-		blown down ar	0 ound Fort To	0 owson	0.10K		Thunderstorm Wind
Pawnee County									
Ralston	Siloan rainfa produ- late at storms low, v	n Springs. By Il totals to exc ced some marg fternoon and eas to produce low hich was local	fired up on the y late afternood eed two inches ginally severe arly evening. Ocally damaginated northwest	on, one thunde is and causing a wind gusts. For Increasing upp ing winds on its	rstorm trave sporadic floc urther south, per level win s track acrossed isolated th	led northe oding along a line of t ds associa s southeas	ast along thi g the way. E thunderstorms ted with an a t Oklahoma.	s boundar By the tim s moved a approachin By late o	Hail (0.75) ching roughly from Okemah to West y, producing torrential rains causing e this storm reached Adair County, it cross southeast Oklahoma during the g upper level low caused this line of evening, the center of the upper level ee and Osage Counties. One of these
OKZ073	Pitts	burg							
	09 11 The N	0000CST 2359CST AcAlester Regi		ecorded record	0 high temper	oratures on	each day fron	n February	Record Warmth y 9-11.
		·	-		-		•	•	

On February 9, the low temperature for the day of 60 degrees Fahrenheit was the warmest low temperature on record for this date.

On February 10, the high temperature of 77 degrees broke the record high temperature for the date, and the low temperature of 62 degrees was the warmest low temperature on record for this date.

On February 11, the high temperature of 70 degrees tied the record high for the date.

		Time	Path	Path	Number of		Estim	ated		February 1999
		Local/	Length	Width	Pers	sons	Dam	age		
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

OKLAHOMA, Eastern

Choctaw County

5~W~Hugo~to 11~0903CST 0~0~14K Thunderstorm Wind Hugo~0913CST

A cattle barn west of Hugo was destroyed by thunderstorm winds. In Hugo, over 550 PSO customers lost their power when the wind broke a support wire from an electric poll which then swung up into the power line, causing a power failure.

Delaware County

 7 NW Colcord
 11
 0930CST
 0
 0
 Thunderstorm Wind (G52)

 Adair County
 5 NNW Stilwell
 11
 1008CST
 0
 0
 4K
 Thunderstorm Wind

A pole barn was destroyed by strong winds.

Severe thunderstorms fired up late on the morning of Feb. 11 along a strong cold front preceded by unseasonably warm and humid air as a potent upper level storm system approached. While most of the thunderstorms developed in western Arkansas, two severe thunderstorms with strong winds developed as far west as Delaware and Adair Counties. In southeast Oklahoma, a severe thunderstorm traveled across Choctaw County, producing damaging winds. The same storm later produced a tornado in McCurtain County.

Osage County

1 W Burbank 16 0107CST 0 0 Hail (0.75)
Osage County
Shidler 16 0115CST 0 0 Hail (0.75)

Although there was not much moisture available in the atmosphere, a cold front and a potent upper level disturbance caused showers and isolated thunderstorms to develop and move across far northern Oklahoma early on the morning of February 16. One such thunderstorm moved across western and northern Osage County, producing dime-sized hail.

OKLAHOMA, Extreme Southeast

Mccurtain County

3.2 NE Idabel to 11 1030CST 0.9 25 0 0 60K Tornado (F1) 4.1 NE Idabel 1032CST

The tornado, witnessed by dozens of people, touched down on new road construction, crossed the road and slammed into the ET Dunlap Center, peeled back the roof and destroyed the interior of the school as well as mangling a satellite dish. Six parked cars were pushed sideways into each other doing little damage. The tornado then moved across the Kiamichi Technology Center damaging the building before moving across Hwy 259 destroying several signs and bending three telephone pools to a 45 degree angle. The tornado then continued into a wooded region. The tornado was described by Randy Barton, an eyewitness, as an upside down bowl which came to a point on the ground. Several eyewitness were within 15 yards of the tornado. The school administrated said there would have been numerous injuries from a collapsing roof except one instructor called in sick cancelling class for the day and other classes were scheduled for just after the event.

OKLAHOMA, Panhandle

NONE REPORTED.

OKLAHOMA, Western, Central and Southeast

Comanche County						
Geronimo	06	1415CST	0	0		Hail (0.75)
Comanche County						
2 S Geronimo	06	1415CST	0	0		Hail (1.00)
Comanche County						
Pumpkin Center	06	1445CST	0	0		Hail (0.88)
Stephens County						
4 W Marlow	06	1445CST	0	0		Hail (0.88)
Stephens County						
5 SE Marlow	06	1445CST	0	0	6K	Thunderstorm Wind
Lincoln County						
1 E Meeker	06	1450CST	0	0		Hail (0.88)
Lincoln County						
4 E Meeker	06	1454CST	0	0		Hail (0.88)
Garvin County						
5 W Lindsay	06	1515CST	0	0		Thunderstorm Wind (G61)

		Time Local/	Path	Path Width		iber of	Estim Dam		February 1999
Location	Date	Standard	Length (Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm
OKLAHOMA, Wes	stern, C	entral and	Southeast	t					
Grady County									
4 SE Bradley	06	1515CST			0	0			Thunderstorm Wind (G61)
Garvin County									
2 W Maysville	06	1520CST			0	0	2K		Thunderstorm Wind
Murray County									
1 S Davis	06	1707CST			0	0	5K		Thunderstorm Wind
Murray County									
Sulphur	06	1707CST			0	0			Thunderstorm Wind (G52)
Murray County									
2 N Sulphur	06	1715CST			0	0	300K		Thunderstorm Wind
Murray County									
3 NE Sulphur	06	1720CST			0	0	4K		Thunderstorm Wind
Pontotoc County									
3 E Roff	06	1725CST			0	0			Thunderstorm Wind (G52)
Hughes County									
3 E Citra	06	1757CST			0	0	0.01K		Thunderstorm Wind
Coal County									
8 N Centrahoma	06	1800CST			0	0			Thunderstorm Wind (G52)
Bryan County									
1 SE Colbert	06	1905CST			0	0			Thunderstorm Wind (G52)
Bryan County									
Albany	06	1940CST			0	0			Hail (0.88)
	One in Coman Marlo a roof barn v house damag	nch diameter h nche County. T w in Stephens (was blown off vas blown down roofs were dange. Also in Mur	ail was first he same sev County. As t a barn 2 mil n 1 mile sou maged. The ray County,	t reported at the ere thunderstorn his storm moved es west of Mays th of Davis; and walls of a chur 3 miles northea	e intersection was then d northeast, sville in Gard then 2 milerch constructs of Sulphu	on of Inter responsible 70 mph with County es north of the cition site var, road sign	state 44 and e for damagi inds were rep y, and then la f Sulphur, po were also des ns were blow	Highway ng roofs a ported on anded 1/4 wer poles stroyed ca wn down,	fternoon and early evening of the 6th. y 36, 2 miles south of Geronimo in and outbuildings 5 miles southeast of the Garvin/Grady County border, and of a mile away. In Murray County, a s were downed, and outbuildings and ausing about 300 thousand dollars in and a small barn was destroyed. The s were downed.
Lincoln County									
Meeker	06	1445CST 1630CST			0	0	0		Urban/Sml Stream Fld

Numerous slow moving thunderstorms developed over much of south central portions of Lincoln County near Meeker during the afternoon of the 6th. and flooded many roads including Sale Barn Rd. and areas south of U.S. Highway 62. Several locations in and around Meeker reported 2 to 3 inches of rain in 1 1/2 hours.

Kay County						
Blackwell	06	2220CST	0	0	0.20K	Lightning
Garfield County						
Enid	06	2248CST	0	0		Hail (1.00)
Noble County						
7 NE Red Rock	06	2300CST	0	0		Hail (0.75)
Garfield County						
Douglas	06	2310CST	0	0		Hail (1.75)
Payne County						, ,
10 SW Stillwater	06	2335CST	0	0		Thunderstorm Wind
10 5 W Sillwater	00	2555 CB 1	U	U		Thunderstorm wind

A few severe thunderstorms developed over portions of north central Oklahoma during the late evening of the 6th. resulting in large hail and one occurrence of damaging winds. Lightning also struck a substation in Blackwell in Kay County, knocking out power to a number of homes for about an hour.

		Time	Path	Path	Numb	er of	Estimated		February 1999
Location	Doto	Local/ Standard	Length	Width	Pers	ons	Damage	rons Character of	•
Location Waste	Date		(Miles)	(Yards)	Killed	Injured	Property Ci	rops Character of	1 Storm
OKLAHOMA, West OKZ004>006- 009>011-014>017- 021>024-027>048- 050>052	Harpo Wash Greer	er - Woods ita - Caddo · - Kiowa	- Alfalfa - F - Canadiar Jackson - T	Ellis - Woodw 1 - Grady - M	cclain - Cle anche - Ste	eveland ephens -	- Pottawatomi Garvin - Mur	e - Seminole - 1	aine - Beckham - Hughes - Harmon - - Coal - Cotton -
	09	2200CST			0	0	•	Fog	
	Numero Rogers both di	ous automobi Lane and Ca rection for ov	over much of le accidents vache Rd. This er an hour. Th	vere reported in particular accione fog was so de	cluding a 3 dent occurred ense that man	car pile-u l around (y people i	p in Lawton (Co 0730 CST on the reported seeing or	manche County) 10th and backed nly a few feet.	nid-morning of the 10th. on Interstate 44 between up traffic for 2 miles in
OKZ004>048- 050>052	- Cust - Grad Tillma	ter - Blaine dy - Mcclai an - Coman	- Kingfishe n - Clevelar	r - Logan - Pa d - Pottawat ens - Garvin	ayne - Becl omie - Sem	kham - V inole - H	Vashita - Cado Iughes - Harm	lo - Canadian ion - Greer - K	Roger Mills - Dewey - Oklahoma - Lincoln iowa - Jackson - - Carter - Johnston -
	11	0700CST			0	0	2.1K	High W	ind
	Reports down a	s of damage in at the Randall	nclude a blow	n out window a Interstate 40 in	t Holmes Wo	odcrafts i	n Wewoka (Sem	inole County), a l	al Oklahoma on the 11th. arge billboard sign blown orner of Cedar and Grant
Dewey County									
Leedey Dewey County	15	2230CST			0	0		Hail (0.8	38)
Putnam Noble County	15	2305CST			0	0		Hail (0.7	75)
5 E Billings	16	0015CST			0	0		Hail (0.8	38)
OKZ033	Harm 22	1645CST	36		0	0		High W	ind (G52)
OREGON, Central a		•	oma Mesonet						
ORZ018>019		_	utes Plateau	ı - Northeast	Oregon				
	02	0000PST			0	0		Heavy S	now
				in the Imbler as		s from ea	rly morning to n	oon. Five to six	inches of snow fell from
ORZ013>014- 016>017-019	North		regon - Cen			lumbia	Basin - Foothi	lls Of The Blue	e Mountains -
	02	1130PST			0	0		High W	ind (G55)
on##*	down is with gu off a sl Lake, owere by snapper swimm into the 613 PM afterno	n Culver. Nu sts to 50 mpl hed and lande eight miles so lown down bd by strong wing. No one back of a traff at the Pendlon. A metal I	merous trees in were reported on power 1 buth of Madra: etween 10 Alind in Bend buth was injured. iiler. Visibiliteton Airport. barn near Elgi	were blown do ad in Helix. Wi ines causing a p s, between noo M and 3 PM. T etween 130 and A woman suffe y was near zero The wind blew n was ripped fro	wn in Hermind gusts to 6 cower outage in and 230 PM rees were al 430 PM. Or or at the time cover a tree a	ston and by a mph we and a sm. At Carso blown the tree fellining on of the high and caused	plocked traffic on ere reported in Co nall fire. Wind g mp Sherman, 10 down near Mau I through a roof of Interstate 84 wes way accident. Po a 30 minute pow	several roads. Sondon. In Sisters, susts to 64 mph will be miles northwest opin and Tumalo, over a public pool t of Pendleton wheak wind gusts of	n outbuilding was blown ustained wind of 35 mph a metal roof was blown were reported at Haystack f Sisters, numerous trees Several large trees were where some people were the car she was in ran 53 mph were reported at field and Echo during the ng wind.
ORZ017			Blue Moun	tains	0	Λ		Utal W	ind (C53)
ORZ014-019		-	ported sustair Northeast		or 30 mph with	0 h gusts to	61 mph in Helix.		ind (G53)
	05 06	2000PST 1400PST			0	0		Heavy S	now

		Time	Path	Path	Numb		Estima		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Pers Killed	sons Injured	Dama Property	ge Crops	Character of Storm
OREGON, Central	and Ea	st							
<u> </u>		_	snow fell in Su	unriver and at	the Pine Mou	antain Obs	ervatory over	night. F	ive inches fell in Bend.
ORZ017>019	Footh	ills Of The I	Blue Mounta	ains - Colun	bia Desch	utes Plat	eau - North	neast O	regon
	06	0815PST			0	0			High Wind (G74)
ORZ019	to 85 r Pendle 10 mil were re mph w Interstance ze down is trees w of 47 r were re outage	mph were reported with a win es east of La Ceported. Blowing the gusts to 71 ate 84 was closero. At least te in the Pendleto were snapped of mph at around	rted 7 miles w d gust of 78 n Grande. In Uni- ng dust and sa mph were rep- sed from Peno n people went n cemetery. If with a peak 315 PM. Wi- gusts to 60 m orted in Missi-	rest of Mitchel nph. Interstate on, the librar nd lowered vis orted near Los lileton to Hern to the hospita The Oregon S gust of 95 mpl nd gusts to 50 ph, light roof	1 at 820 ÅM 8 84 was close y roof was disibility to neatine at 1230 niston from 1 1 with injurice tate Universal at around 1 mph were redamage, ro	I. A roof sed due to lamaged, ar zero alo PM. Wind 1130 PM tes sustaine ity experir 00 PM. Teported nead closure	was blown of white out cot a tree fell on ng Highway 1 gusts to 81 to 500 PM w d from severnental station he Hermiston ear Winlock as due to blow	off a carporal a house a house 97 near (mph were ith blow all traffic a Municipat around	ined wind of 30 to 50 mph with gust out at 930 AM about 15 miles east of and wind to 50 mph in Ladd Canyo. Trailer, and wind gusts over 50 mph Culver at noon. Sustained wind of 4 e reported in Condon around 100 PM ing dust and sand causing visibilities pile-ups on I-84. Four big trees bles north of Pendleton, reported that 2 and Airport recorded a peak wind gust 300 PM. In Wallowa county, there y, and scattered tree damage. Power
ORZUI	09	0000PST	L		0	0			Heavy Snow
		0900PST							neavy snow
		nches of new s				ight to 900	AM.		
ORZ018>019		nbia Deschu	tes Plateau	- Northeast	U				
	13 14	2000PST 0800PST			0	0			Heavy Snow
	Five in				4 inches fel	l in La Gr	ande, Lostin	e, and U	kiah; 3 inches inches fell at the Joh
ORZ014-018>019	Centr	ral Oregon -	Columbia I	Deschutes Pl	ateau - No	rtheast C	regon		
	16	1600PST			0	0			Heavy Snow
	Sunriv	er overnight.	snow fell over	ernight in Aus	stin/Bates an	d 4 inches	s fell in Mea	cham. S	ix and a half inches of snow fell in
ORZ014	Centi	ral Oregon							
	17 18	2200PST 0900PST			0	0			Heavy Snow
		The heavy							Sunriver. Five inches of snow fell i ere also numerous car accidents an
ORZ017	Footh	ills Of The l	Blue Mounta	ains					
	18	0000PST			0	0			High Wind (G45)
									e estimated at 50 mph. There wer used heavy damage to a mobile hom
ORZ018		nbia Deschu	•	or tree innes e	iowing acros	з рожег п	nes. The win	a also ca	used heavy damage to a moone nom
	18	0500PST 1200PST			0	0			Heavy Snow
	Two to	o four inches o	f new snow fel	ll during the m	orning in Fo	ssil.			
ORZ019	North	neast Oregon	l						
	21	2000PST			0	0			Winter Storm
		1530PST nam received a so reported. 12						ng in just	7 hours. Blowing and drifting snow
ORZ018		nbia Deschu				<i>8</i>			
	22	0600PST 1430PST			0	0			Heavy Snow
ORZ019		ches of snow fe		ht to 230 PM i	n Bates.				
		0200DET			•	0			TT G

0

0

Heavy Snow

27

0200PST

2300PST

		Time	Path	Path	Num	ber of	Estim	ated	February 1	999	
		Local/	Length	Width	Per	rsons	Dam	age	3	1 0010001 1 1 1 1 1 1	
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm		

OREGON, Central and East

Snow started early morning in Tollgate and by late evening a total of 6 to 8 inches had fallen. At Meacham, Ladd Canyon, and Ukiah, 2 to 3 inches of snow fell during the day.

OREGON, Northwest

ORZ001>002-004>005-011

Northern Coast - Central Coast - Northern Willamette Valley Including Portland Metro Area - Central Willamette Valley Including Salem - Northern Cascades

135K High Wind (G104) 06 1800PST

One of the stronger Pacific storms of the winter season resulted in damaging winds when it moved over the coastal area and interiors of NW Oregon and SW Washington. One of the more dramatic events associated with this storm was the destruction of a Keizer, Oregon mobile home. It was crushed by a wind-toppled 200 foot-tall Douglas Fir tree. Many thousands of residents were without power at various times as falling limbs and trees cut power lines. At higher elevations in the Cascade mountains, very strong wind gusts were reported. Mt Bachelor ski area reported a wind gust of 120 MPH. Mt Hood Meadows ski area reported a 103 MPH wind gust. No injuries were reported but resort operations were shut down. During the height of this storm, the National Weather Service's Doppler radar, located just NW of the Portland area, detected winds at 110 MPH at the 7000 foot elevation level.

ORZ011 Northern Cascades

> 05 1800PST **Heavy Snow** 1500PST 07

A Pacific weather system dumped large amounts of snow over the Washington and Oregon Cascades. Up to 33 inches of snow were reported (Mt. Hood Meadows Ski Area). Oregon Dept. of Transportation measured 30 inches of snow from this storm at Santiam Pass on Hwy 20. The heavy snow briefly closed roads and made travel across the mountains very difficult.

Northern Coast - Northern Willamette Valley Including Portland Metro Area ORZ001-004

> Flood 2100PST 11

Moderate rains following a prolonged period of saturated conditions and elevated streamflows resulted in minor flooding in Northwest Oregon. Flooding on coastal rivers subsided quickly, but elevated streamflows lingered on some of the slower responding rivers of interior Northwest Oregon. No property damage was reported. A few roads in rural Washington County near Dilley were closed by high water for several days.

Multnomah County

Portland Intl Arpt

1708PST 08 0 Lightning

An Alaska Airlines aircraft returned to land after being struck by lightning shortly after takeoff. There were no injuries or property damage reported. 122 people were on board the aircraft. A strong Pacific cold front was moving over the area.

ORZ001>002 **Northern Coast - Central Coast**

> 1000PST 100K Flood 1700PST

Extremely heavy swells that were built by storms moving over the Eastern Pacific hit the NW Oregon and SW Washington Coasts. The worst of the damage occurred within 2 hours either side of the high tide times which were around noon. Big waves tossed tons of logs and other debris onto US Hwy. 101 near the towns of Neskowin and Rockaway--closing the road. Several reports of logs being tossed onto and through structures were received throughout Oregon. Parts of beaches and dunes eroded several feet. A motel owner in Lincoln City, Oregon remarked that it was the worst coastal flood he had seen in 15 years. At 11:00 AM PST Mo's Restaurant in Cannon, Beach, Oregon was hit by a wave-borne log that broke four plate glass windows. Fortunately, the manager had closed the business that day in order to prevent injuries during the storm.

River traffic on the entire Columbia River system was stalled when ships could not navigate the Mouth of the Columbia River due to extremely dangerous waves breaking at the Columbia River Bar. The Bar was closed between 10:00 AM PST and 8:30 PM PST.

ORZ001>002-004

Northern Coast - Central Coast - Northern Willamette Valley Including Portland Metro Area 1700PST 20 100K High Wind (G70)

22 1500PST

Back to back wind storms moved over NW Oregon and SW Washington producing widespread high winds and minor to moderate damage. Most damage was due to limbs being blown off trees causing utility outages. A NWS Meteorologist conducted a storm survey to investigate a particularly intense and localized area of damage near the boundary of Gresham and Portland, Oregon just north of NE Halsey Street. Around 8:40 PM PST to 8:55 PM PST winds estimated to be in excess of 70 mph tore off roofing material from several buildings at the Sandstone Manor Apartment Complex at 11611 NE Russell. More damage occurred to homes about 100 yards to the Southwest. Damage ranged from knocked down fences to uprooted trees. Wind driven shingles damaged cars and nearby structures. Eye witnesses reported dark clouds but no rotating cloud structures. There were thunderstorms associated with an intense Pacific front that was passing through the area at that time.

ORZ011 Northern Cascades

> 0600PST 22 **Heavy Snow**

23 1500PST

A cold front dumped heavy snow over the mountains of NW Oregon and SW Washington. The heaviest snow accumulation

		Time Local/	Path Length	Path Width		ber of sons	Estimated Damage		February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm

0

OREGON, Northwest

reported received was 14 inches in 12 hours at Santiam Pass. Less snow was received farther north, Mt Hood Meadows ski area reported only 6 inches from the storm.

ORZ001>002

Northern Coast - Central Coast

23 1500PST 24 1300PST

High winds associated with a moderately strong Pacific weather system produced strong winds on the coasts of NW Oregon and SW Washington. The strongest winds were on the North Oregon Coast where a weather spotter reported winds of 86 MPH in Netarts. Other wind reports were 10 to 20 mph lower. Astoria Airport ASOS had a gust of 64 MPH. No injuries or damage was

0

ORZ001>002

Northern Coast - Central Coast

26 2200PST 27 2000PST 0 High Wind (G41)

A minor high wind event occurred when a Pacific Storm moved over the area. Winds barely reached high wind thresholds and no damage or injuries were reported. A weather spotter reported 65 MPH gusts in Netarts.

ORZ001>002-004>005

Northern Coast - Central Coast - Northern Willamette Valley Including Portland Metro Area - Central Willamette Valley Including Salem

winamette vaney including Sale

27 1300PST 28 2359PST

0 Flood

Heavy rains produced flooding along interior rivers of NW Oregon. Flooding was minor and mostly limited to flooding of agricultural lands some roads were closed due to high water in rural Washington County near Dilley.

OREGON, Southeast

ORZ020

Baker

0400PST 1200PST 0 Heavy Snow

A winter storm brought local heavy snow to Baker County with Halfway reporting 8 inches of new snow.

ORZ020 Baker

06 0300PST 1700PST 0 0 Heavy Snow

A winter storm produced significant snow over much of eastern Oregon. Two to 4 inches generally fell, with local heavy amounts. In Baker County 6 to 7 inches of new snow fell at Halfway.

ORZ021

Lower Treasure Valley

08 1600MST

0 0 5K

High Wind (G50)

High Wind (G75)

During the evening of February 8th high winds damaged the roof of a school gymnasium near Ontario, Oregon. Local terrain apparently funnelled the wind into locally heavy gusts with no other high wind reports in the area.

ORZ020-022

Baker - Southeast Oregon

09 0200PST 1800PST 0 0

Heavy Snow

A winter storm produced heavy snow over Baker County and local heavy snow over Southeast Oregon. In Baker County 12 inches fell at Sumpter and Unity with 8 inches reported from Baker City. In Southeast Oregon 4 to 5 inches fell in the Burns area, with 6 inches reported from Frenchglen. Eight to 9 inches fell near Juntura.

ORZ020

Baker

16 2000PST

0

Heavy Snow

Heavy Snow

17 0500PST A winter storm produced 10 inches of new snow at Sumpter.

ORZ020

Baker

8 0500PS

0500PST 0 2000PST

Baker County received heavy snow from a winter storm system. Six inches fell at Halfway and Sumpter with generally 3 to 4 inches on the Baker Valley floor.

OREGON, Southwest

ORZ003-003

Southern Coast

03 2300PST 04 0200PST 0 High Wind (G54)

Cape Arago winds 35 KT gusting to 54 KT

Another in a long series of windy winter storms hit the Oregon coast on 02/03/99 and lasted into 02/04/99. This time around, the only winds verifying a high wind warning were recorded at Cape Arago.

		Time	Path	Path	Num	ber of	Estim	ated	February 19	99
		Local/	Length	Width	Per	rsons	Dam	age		
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

OREGON, Southwest

ORZ003-003-003-003-003-003-003-003-003-003-003-003-003

Southern Coast

05 1300PST

High Wind (G65) 0955PST

Cape Blanco winds 52 KT gusting to 74 KT

One of the strongest storms of the year struck the Oregon Coast on these dates, bringing an extended period of high winds to the coast. The strongest winds are summarized above. The High Wind Warning was issued for this event at 0630 LST on 02/05/99; it was cancelled at 1800 LST on 02/06/99.

ORZ012 Southern Cascades And Siskiyou Mountains

Winter Storm 0700PST

Official storm totals: 20" at Crater Lake; 22" at Howard Prairie; 15" at Siskiyou Summit.

A strong winter storm moved into Southern Oregon and Northern California on this date. Several reported stations had snowfall amounts which exceeded Winter Storm Warning criteria. A Winter Storm Warning was issued for this system at 1457 LST on 02/05/99 and was cancelled at 0515 LST on 02/07/99.

ORZ003-003 **Southern Coast**

0600PST High Wind (G66) 0 0

Cape Arago winds S 20KT gusting to 50KT.

A short-lived storm hit the Southern Oregon coast early in the morning. The peak winds, listed above, were recorded before the High Wind Warning was issued. The winds diminished quickly thereafter. The warning was issued for the headlands only at 0736 LST and cancelled at 0840 LST.

ORZ003 Southern Coast

06 2050PST Flood

09 0600PST

See below

The Coquille River flooded again due to heavy rainfall in the Southern Oregon coastal areas.

The river reached a stage of 21.23 feet at Coquille (flood stage 21.0 feet) at 0945 LST on 02/08/99.

ORZ008-008-008-

008

Rogue Basin

0402PST **Heavy Snow** 1150PST

3 spotters in Ashland reported 7-8" snow, other spotters reported 5"at Talent and Prospect.

An unusually cold and wet storm dumped quite a bit of snow in the Rogue Basin...as low as 1200 feet or so. The heavy snow warning was issued for elevations above 1500 feet at 0402 LST and cancelled at 1150 LST.

ORZ015-015-015-015-015-015-015

South Central Oregon

0818PST Winter Storm 1046PST

Spotter LA19 at Summer Lake reported 12" snow in 24 hours. Wind 20-40 mph with visibility 200 yards in blowing snow. A cold and wet system dumped plenty of snow with gusty winds as it passed through South Central Oregon. The Winter Storm Warning was issued at 0900 LST and cancelled at 1430 LST.

ORZ003-003-003-003

Southern Coast

1458PST High Wind (G60) 0 1858PST

Cape Blanco winds 37KT gusting to 59KT.

Yet another windy storm moved onshore Southern Oregon on this date. The High Wind Warning for the Southern Oregon coast

		Time	Path	Path	Num	ber of	Estim	ated	February 1999
		Local/	Length	Width	Per	sons	Damage		•
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm

OREGON, Southwest

was issued at 0550 LST and cancelled at 2231 LST. Warning criteria was exceeded at Cape Blanco from 1158 LST to 1858 LST. The maximum sustained wind and gusts at the two verifying stations is listed above.

ORZ003 Southern Coast

6 1505PST 0 0 Flood

Coast Guard reported that a pickup truck and occupants were transported 250 feet up the beach by 30 foot waves in recreation area north of Winchester Bay.

A Coastal Flood Warning was issued at 0850 LST and cancelled at 2019 LST. The above report was the only verification available.

ORZ015-015 South Central Oregon

17 0530PST 0 0 Heavy Snow 0844PST

Spotter KL45 in Crescent reported 8-10 inches of new snow overnight between 1830 and 0430. A limited heavy snow episode for which no warnings were issued.

ORZ003 Southern Coast

18 0600PST 0 0 High Wind (G36) 0700PST

Cape Arago 36KT sustained wind at 0600 LST...Peak Gust of 58KT at 0700 LST.

The High Wind Warning for this storm was issued at 0456 LST and cancelled at 1155 LST. Only a few observations at Cape Arago at 0600 and 0700 LST met the warning criteria and are listed above.

ORZ003 Southern Coast

18 0700PST 0 0 Flood 20 2240PST

See stage readings below.

Heavy rains caused yet another flood on the Coquille River near Coquille. Stage readings below

Coquille River at Coquille (Flood Stage 21.0 feet).

21.7 feet at 19/0445 LST 21.3 feet at 19/0745 LST 21.48 feet at 20/1145 LST 21.1 feet at 20/1745 LST

ORZ003-003-003 Southern Coast

20 1500PST 0 0 High Wind (G63) 1700PST

Cape Blanco winds 34KT gusting to 63KT.

Yet another winter storm brought high winds to the South Oregon coast. The High Wind Warning was issued at 0649 LST and cancelled at 2025 LST. Warning criteria were met at Cape Blanco from 1400-1700

LST and at Gold Beach 1600-1700 LST.

ORZ003-003-003-003-003

Southern Coast

22 0900PST 0 0 High Wind (G59) 1400PST

Gold Beach winds 38KT gusting to 45KT.

Another winter storm brought high winds to the Southern Oregon Coast. A High Wind Warning was issued at 0846 PST and cancelled at 1614 PST. The highest sustained and peak gusts at all verifying stations is reported above. Cape Blanco had gusts exceeding 50 KT for nine hours.

ORZ003-003-003-003

Southern Coast

23 2200PST 0 0 High Wind (G54) 24 0700PST

Gold Beach winds 44KT gusting to 56KT.

A strong winter storm struck the Southern Oregon coast on 02/23 and 02/24. A High Wind Warning was issued at 1345 LST on the 23rd and cancelled at 1811 LST on the 24th. The highest sustained wind and peak gust at verifying stations are listed above. Cape

		Time Local/	Path Length	Path Width	Number of Persons		Estimated Damage		February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm

OREGON, Southwest

Blanco winds met high wind warning criteria for 22 hours.

ORZ003-003-003-003 Southern Coast

27 0058PST 1658PST

0058PST 0 0 High Wind (G65)

Cape Blanco winds 46KT gusting to 61KT.

Yet another in a long series of windy winter storms struck the Southern Oregon coast. The highest sustained wind and peak gust for all verifying stations are listed above. The High Wind Warning was issued at 2139 PST on the 26th and cancelled at 2200 PST on the 27th. Gold Beach met high wind warning criteria for 18 hours, Cape Blanco for 24 hours.

Josephine County

Wilderville 28 0143PST 0 0 Flash Flood

Slade Creek at Wilderville reported out of banks and threatening a nearby road.

Josephine County

Selma 28 0931PST 0 0 Flash Flood

Spotter JO23 5 E Selma reported Deer Creek above bankfull between mileposts 5 and 6.

A Small Stream Flood Warning was issued for Josephine County at 2230 LST on the 27th and cancelled at 1400 LST on the 28th.

ORZ003 Southern Coast

28 0630PST 0 0 Flood 2359PST

See stage readings below.

A Flood Warning was issued for the Coquille River from Myrtle Point to Bandon at 0630 PST on 02/28...and reduced to Coquille to Bandon at 1201 PST on 02/28. The flooding lasted into the next month, and the warning was cancelled at 1300 PST on 03/02.

Stage readings from the Coquille River at Coquille (Flood Stage 21.0 ft)

28/0630	20.06 ft.
28/0945	20.50 ft.
28/1145	20.80 ft.
28/1645	21.30 ft.
01/0245	22.15 ft.
01/0745	22.16 ft.
01/1645	21.90 ft.
02/0545	21.03 ft.
02/1145	20.45 ft.

ORZ003 Southern Coast

28 0830PST 0 0 Flood 2359PST

See stage readings below

A Flood Warning was issued for the Lower Rogue River from Agness to Gold Beach at 0830 PST on 02/28. The warning was cancelled at 0835 PST on 03/01.

Stage reading on Rogue River at Agness (Flood Stage 17.0 feet):

28/0800	17.26 ft.
28/1445	19.06 ft.
28/2045	19.00 ft.
01/0400	17.60 ft.
01/0700	16.72 ft.

PACIFIC

Guam

Tamuning 05 2330AST 1 0 Rip Currents 06 0145AST

M34IW

Guam

Asan 07 0920AST 0 2 Rip Currents 1100AST

		Time Local/	Path Length	Path Width		nber of	Estimated Damage		February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm
PACIFIC									
Guam									
Ritidian Point	07	1325AST 1400AST			0	0			Rip Currents
Guam									
Countywide	12 13	0730AST 0600AST			0	0			Urban/Sml Stream Fld
Guam									
Countywide	14 15	2000AST 0900AST			0	0			Urban/Sml Stream Fld
Guam									
Central Portion Saipan	14	2130AST			0	0			Lightning
Saipan Intl Airport	15	1216AST 1228AST			0	0			Waterspout

Hazardous surf and strong currents caused by strong northwest swells were present across the Marianas Islands. Daniel Cepeda Mafnas, 34, disappeared while spear fishing in Tumon Bay near the Hilton Hotel side of Ypao beach. Four men, including Mafnas, went into the water around 2330 on the 5th. About an hour and a half later three of the men came out of the water. They could not find Mafnas and called 911 at around 0100 on the 6th. His body was later found near the Fujita Hotel around 0145.

On the 7th the Hazardous surf and strong currents caused by strong northwest swells continued across the Marianas Islands. This caused trouble in two locations. Rescue units received a call around 0920 that two divers were in distress in the waters just north of the War in the Pacific National Historic Park in Asan. When rescuers arrived at the scene one of the divers had made it to shore. The other man was still caught in the channel. Rescuers pulled him from the water. The two men suffered minor injuries. At 1325 two men were swept over the reef at Ritidian Point. Rescuers pulled them out of the water. Both of the men were not injured. The two men said that they were both swimming inside the reef when the currents swept them over the reef.

The rough seas and currents also caused trouble in the Marianas One Man Canoe Series. Paddlers were suppose to go from Tumon to Hagatna, but big waves on the reef in Tumon wiped out one canoe and forced several paddlers to turn back. Race officials decided to call off the race until the seas calmed.

Showers caused by a tropical disturbance southeast of Guam brought heavy rains to the island with 3.37 inches of rain falling on the 12th. This caused Urban and Small Stream flooding across the island.

The tropical disturbance eventually developed into Tropical Depression 02W on the 14th when it was near Yap. Showers associated with convergence into the tropical depression brought more heavy rain across Guam with 3.60 inches of rain falling on the 14th. A lightning strike from a thunderstorm hit two main power lines in the Nimitz Hill Area. Since this line was a large transmission line it's loss caused an island wide power outage. Power was out from 2130 on the 14th until the morning of the 15th.

An additional 3.49 inches of rain on the 15 th caused more localized flooding. 10 people had to be evacuated from their homes at Lemoncito Street in Dededo. No injuries were reported and damage was unknown.

On the 15th a waterspout was seen by the observer at the Saipan International Airport. He reported it southwest of the station from 1216 to 1228.

Tropical Depression 02W becomes Tropical Storm Iris at 1000 on the 17th. Later in the day the tropical storm moved west of 130E and out of the Guam Area of Responsibility.

PENNSYLVANIA, Central

PAZ041>042-046- Northern Lycoming - Sullivan - Southern Lycoming - Columbia 053

07 2300EST 0 0 Heavy Snow

Low pressure tracked northeast across Pennsylvania bringing a mixture of precipitation to the state. Only across the northern mountains was the atmosphere cold enough for the precipitation to remain as snow. Laporte in Sullivan County reported 7 inches of new snow, while areas from Williamsport and Muncy east across northern Columbia and southern Sullivan counties picked up 6 inches. Areas further north had less moisture and totaled about 3 to 4 inches of snow. Generally, to the south of I-80, precipitation was a mix of sleet and snow, limiting accumulations to about an inch or less.

Franklin County

5 W Mercersburg 12 1245EST 0 0 5K Thunderstorm Wind

Trees were blown down on wires along Tuscarora Ridge.

		Time Local/	Path Length	Path Width	Number of Persons		Estimated Damage		February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm
PENNSYLVANIA,	Central	<u>[</u>							
Cumberland County									
West Fairview	12 Trees	1309EST and wires dow	n.		0	0	5K		Thunderstorm Wind
York County									
Spring Grove	12 Winds	1437EST s gusted to 67 s	nph.		0	0			Thunderstorm Wind (G58)
York County									
Dover	12	1440EST			0	0	10K		Thunderstorm Wind
York County									
Emigsville	12	1450EST			0	0	5K		Thunderstorm Wind
York County									
York	12	1500EST			0	0	10K		Thunderstorm Wind
	Winds	damaged the	roof of a coup	ole of homes in	Dover and Y	York, and to	ook down tre	es in Emi	gsville.
Lancaster County									
Brownstown	12	1530EST			0	0	5K		Thunderstorm Wind
		were blown do	own in Brown	stown.					
<u>PENNSYLVANIA,</u>	<u>East</u>								
PAZ054>055- 060>062-067>071	Carb	on - Monro	e - Berks - L	ehigh - Nort	champton -	- Chester	- Montgor	nery - B	ucks - Delaware - Philadelphia
	01	0000EST			0	0	0	0	Drought

The combination of an extremely wet January and melting snow and ice in the headwater region permitted the Delaware River Basin Commission to lift its drought warning on February 2nd. More precipitation though was needed to overcome the long-term shortages especially with respect to ground water supplies. Thus the Pennsylvania State Department of Environmental Protection's drought warning remained in effect through February. On a county weighted average, February 1999 monthly precipitation across Eastern Pennsylvania was a few tenths of an inch below normal (around 90% of normal). The only exception was Carbon County where the county average monthly precipitation total of 1.9 inches was 68 percent (or .9 of an inch below) of normal.

PAZ054>055-062

PAZ055

Carbon - Monroe - Northampton

2359EST

01	2000EST	0	0	0	Freezing Rain
02	0600EST				

A low pressure system developed along the Gulf Coast the morning of February 1st. A broad southwest flow preceding the low brought warmer air aloft and precipitation into the Middle Atlantic States. A high pressure system that retreated from New Jersey into the Canadian Maritimes on the morning of the 2nd kept enough cold air near the ground for precipitation to start as freezing rain in sections of the Lehigh Valley and most of the Poconos the evening of the 1st. The low tracked northeast along the coastal plain and brought in milder air that raised temperatures above the freezing mark in all areas by the morning of the 2nd. Precipitation was light and intermittent during the evening of the first and became steadier after midnight. Temperatures rose above the freezing mark before the heavier rain moved north. About one to two tenths of an inch of ice accrued on exposed surfaces before the change to plain rain. Untreated roadways and walkways were treacherous.

PAZ054 Carbon

28

07	1300EST	0	0	0	Snow
08	0400EST				
Mon	roe				
07	1300EST	0	0	0	Heavy Snow
08	0400EST				

Heavy snow fell over sections of the Poconos from the Sunday afternoon of the 7th into the early Monday morning of the 8th. Accumulations in Monroe and Carbon Counties ranged from two to six inches. The snow fell at a fairly consistent rate. This combined with the heaviest precipitation occurring on a Sunday night reduced the number of accidents. Flurries lingered into the morning of the 8th, but the steady snow was over well before the morning commute. Farther south across the Lehigh Valley and upper parts of Berks, Montgomery and Bucks Counties, precipitation started as snow during the late afternoon of the 7th, mixed with or changed over to rain during the evening of the 7th and then went back to snow before ending on the 8th. Accumulations were lighter, generally one to two inches. In the Poconos accumulations included 6 inches in Long Pond, 5 inches in White Haven (Luzerne County), 4 inches in Saylorsburg, 3 inches in East Stroudsburg and 2 inches in Lehighton.

A low pressure system was located in the central Ohio Valley the morning of the 7th. A second low formed along the primary low's warm frontal boundary in North Carolina the evening of the 7th. This low became the main low and quickly moved offshore on the 8th. By 7 a.m. EST on the 8th, the low was already about 275 statute miles east of Fenwick Island, Delaware. The fast track prevented heavier snow from falling across the region.

		Time	Path	Path	Num	ber of	Estimated		February 19	999
		Local/	Length	Width	Per	rsons	Dam	age	3	
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

PENNSYLVANIA, East

PAZ054

Carbon

1600EST

0 0 **High Wind** A strong cold frontal passage produced high winds across southeast sections of Carbon County. A warehouse trailer was blown over and several barns were damaged. No injuries were reported. Preceding the front, the high temperature soared to a record breaking 69 degrees (previous record was 59 degrees set in 1932) at the Lehigh Valley International Airport.

Chester County

4 NE Malvern

12 1700EST Thunderstorm Wind (G50)

A squall line of strong to locally severe thunderstorms moved through Chester County. Several trees and wires were knocked down from Tenderizer Township west through West Whiteland Township. U.S. Route 202 was closed because of downed wires. About 3,000 homes in Chester County lost power. An unseasonably warm air mass and a strong cold front conspired to produce a line of strong to locally severe thunderstorms across southeast Pennsylvania. Preceding this line, high temperatures soared to record breaking levels at both the Philadelphia (70 degrees, previous record 61 degrees set in 1898) and Lehigh Valley (69 degrees, previous record 59 degrees set in 1932) International Airports.

Bucks County

2 NE Langhorne

1800EST Thunderstorm Wind (G50)

A squall line of strong to locally severe thunderstorms moved through Bucks County. The worst damage occurred in Middletown Township. High winds blew through the ventilation system of the Crestview Nursing and Rehabilitation Center and caused tiles to fall from the ceilings. Two elderly persons were injured. Shingles were also ripped from the roof of the nursing home. Elsewhere in the township, a number of trees were either snapped or uprooted. An unseasonably warm air mass and a strong cold front conspired to produce a line of strong to locally severe thunderstorms across southeast Pennsylvania. Preceding this line, high temperatures soared to record breaking levels at both the Philadelphia (70 degrees, previous record 61 degrees set in 1898) and Lehigh Valley (69 degrees, previous record 59 degrees set in 1932) International Airports.

PENNSYLVANIA, Northeast

NONE REPORTED.

PENNSYLVANIA, Northwest

PAZ002>003

Southern Erie - Crawford

1700EST

0 0 **Heavy Snow**

1600EST

Heavy lake effect snow accumulations averaged six to ten inches. The ground was warm from a couple of weeks of mild weather and some melting occurred, especially on roads and sidewalks, which lessened the impact of the snowfall.

PENNSYLVANIA, West

NONE REPORTED.

PUERTO RICO

PRZ005-013-069-127

Aguadilla - Arecibo - Humacao - San Juan

40K 0600AST **Coastal Flooding** 03 0600AST

An strong low pressure system developed across the central atlantic producing large north swells across the north coasts of Puerto Rico and the U.S, Virgin Islands. An associated cold front moved across the region during the afternoon hours on February 1. Ahead of the front, winds were light from the north and the air mass was considerably dry. Unusual cooler temperatures were felt during the morning of February 1 across the southern slopes and south coast of Puerto Rico. Adjuntas a town located in the southern interior Puerto Rico reported 48 degrees and Ponce in the south coast 56 degrees.

On the morning of February 2, large north swells started to arrive along the north coast of Puerto Rico. Swells were estimated between 15 to 17 feet over exposed areas. Several coastal roads in Arecibo, Loiza, Hatillo, Isabela and Aguada were closed due to water, sand and debris on the road. In Arecibo few cabins in a recreational park were partially damage. In Loiza a few houses also were affected by the seas, and in Aguadilla several fishing boats suffered some damages. .

Humacao

Luquillo 0800AST Rip Currents

0830AST

A tourist in Luquillo beach drowned as a consequence of strong rip currents. M64IW

Ponce

1330AST **Ponce** Urban/Sml Stream Fld

1530AST

Strong thunderstorms produced very heavy rainfall and pea size hail in Ponce. In addition urban flooding was reported.

		Time	Path	Path		ber of	Estim		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Killed	sons Injured	Dam Property	Crops	Character of Storm
RHODE ISLAND									
Kent County									
Coventry	02 03	1500EST 0300EST			0	0			Heavy Rain
Providence County									
Cranston	02 03	1500EST 0300EST			0	0			Heavy Rain
RIZ002>007	South	neast Provid	ence - West	ern Kent - E	astern Kei	nt - Brist	ol - Washi	ngton - I	Newport
	02 03	1800EST 0000EST			0	0			Strong Winds
RIZ007	Newp	ort							
	rain. 7	The peak gust in the p	reported was of lence. As mu	55 mph at Tive	rton, in New es of rain fel	port Coun l in Cover	ty. Other str ntry. A spott	ong wind er in Cran	High Wind (G56) outheast winds and over two inches of gusts included 55 mph at Barrington ston reported 2.56 inches, Providence oding.
RIZ002	South	neast Provid	ence						
				ees at T.F. Gre which was set		0 n West W	/arwick, read	ched durir	Record Warmth ng the late evening hours, broke the
RIZ001>007	North Newp		lence - Sout	heast Provid	lence - We	stern Ke	nt - Easter	n Kent -	Bristol - Washington -
	25 0000EST 0 0 0 Heavy Snow 26 0300EST A strong low pressure system, which passed about 200 miles southeast of Cape Cod, brought heavy snow to Rhode Island. Over a foot of snow was reported west and north of Providence. The storm closed schools across the state, and created hazardous road conditions. This was the heaviest snowfall of the winter to date. The highest snowfall reported was 14.9 inches in North Foster. Other snowfall amounts included 14 inches in Clayville, 13.5 inches in Westerly and Middletown, 13.3 inches in Ashaway, and 12 inches in West Warwick and West Greenwich. Woonsocket reported 8 inches, and the greater Providence area received between 6 and 8 inches of snow.								
SOUTH CAROLINA			•						
Aiken County	,								
5 W Aiken	19 Sherif	1020EST If reported golf	ball size hail	west of Aiken.	0	0		0	Hail (1.75)
Orangeburg County									
3 WSW Woodford to 2.5 WSW Woodford		-	0.5 ado touchdow	20 on southwest of	0 Woodford.	0 Damage s	0 survey reviel	0 ed an F0 t	Tornado (F0) touched down near a church and went
Orangeburg County	into ui	e woods.							
23 NW Orangeburg	19 Fire de	1313EST	alf hall size h	ail northwest of	0 Orangeburg	0		0	Hail (1.75)
Calhoun County	THE	cpt. reported go	on oan size na	iii iioitiiwest oi	Orangeourg	,•			
St Matthews	19 Sherif	1354EST If reported nick	el size hail in	St Matthews	0	0		0	Hail (0.88)
Orangeburg County	Sherii	r reported mek	er size nam m	St. Maturews.					
Elloree	19 City p	1435EST olice reported	3/4 inch hail		0	0	0	0	Hail (0.75)
Clarendon County	J P								
Summerton	19 City p	1442EST olice reported	1 inch hail.		0	0		0	Hail (1.00)
Clarendon County 8 S Manning	19	1454EST		:1	0	0		0	Hail (1.75)
	rife de	ept reported go	ni Dan Size na	11.					

		Time	Path	Path	Numb		Estimated	February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Perso Killed	Injured	Damage Property Crops	Character of Storm
SOUTH CAROLINA	. Nort	h Coastal						
Williamsburg County	,							
2 W Andrews	19	1335EST 1340EST			0	0		Hail (0.75)
a . a .	Hail re	port from alor	g US 521 in	Williamsburg	Co.			
Georgetown County	40	42.40FGF						
Andrews to Murrells Inlet	19	1340EST 1451EST			0	0		Hail (1.00)
					Reports of h	ail from	dime to quarter size	came from Andrews, Brown's Ferry,
Horry County								
Garden City to Surfside Beach	19	1450EST 1500EST			0	0		Hail (0.75)
Horry County								
Socastee	19	1520EST 1525EST			0	0		Hail (0.75)
Williamsburg County								
Greeleyville to Salters	19	1525EST 1540EST			0	0		Hail (0.75)
Georgetown County								
5 NW Oatland	19	1635EST 1640EST			0	0		Hail (0.75)
\$\$ 7*11* 1	Hail re	port from Bro	wn's Ferry, w	here SC 51 cro	osses Black Ri	ver.		
Williamsburg County								
5 W Kingstree SOUTH CAROLINA	28 A. Nort	1350EST hwest			0	0		Hail (0.88)
SCZ004>008-010			- Southern	Pickens - So	outhern Gre	enville -	Spartanburg - Ch	erokee - Anderson
	01	0000EST			0	0	1 0	Freezing Rain
		-		ne of sub-freez	-			e on contact during the early morning
SCZ008>009		okee - York		.p to 1/our or a				
	19	1200EST			0	0		Snow
	I over me	1800EST	- 0.040.00 .004tm	al Casmais and			ood mainly a gold main	
	afterno	on just enough	n cold air mo		orthern parts of			for the Upstate. However, during the to turn the precipitation over to snow.
SCZ006>007- 010>012-019		•				beville -	Laurens - Greenw	rood
	24	0000EST 0600EST			0	0		Snow
	some li	ight snow acro	ss parts of th he Hartwell I	e Upstate. Mos Dam to just no	st areas receive orth of Lauren	ed betwee s produce	en a dusting and one in	an upper level disturbance to produce nch. However, one band of snow that ches. Roads became quite slick even ct) in Pickens county.
Spartanburg County								
Spartanburg	28	1140EST			0	0		Hail (0.75)
York County	•0	444==~						
Rock Hill Bryant Arp			orms develop	ed along an a	0 dvancing colo	0 d front ar	ound midday. Two s	Hail (0.75) storms became severe and produced
	dime-si	ize hail.						

Storm 1	Data a	and Un	usual W	eather	Phenomena
	vata t		usuai 🗤	caulti	1 IICHVIIICHA

		Time	Path	Path		ber of	Estim		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per: Killed	sons Injured	Dam Property	age Crops	Character of Storm
SOUTH CAROLIN	A Sou	th Coastal						•	
Berkeley County	11,000	tir Coustur							
2 E Bonneau	19	1255EST			0	0			Hail (0.88)
Berkeley County		1300EST							
Moncks Corner	19	1317EST			0	0			Hail (0.88)
		1322EST	9 14	,	Ū	Ū			22412 (0100)
Berkeley County	Pea to	nickel sized ha	ill covered th	e ground.					
Jamestown	19	1340EST			0	0			Hail (0.88)
		1345EST			-				(0.00)
SOUTH DAKOTA,	Centra	al and North	<u>1</u>						
	NON	E REPORTED.							
SOUTH DAKOTA,									
SDZ068>071	Bon 1	Homme - Ya	nkton - Cla	y - Union					
	22	0700CST			0	0			Heavy Snow
	Snow	2300CST fall of 6 to 9 inc	hes slowed t	ransportation. T	he snow also	o forced sc	hools and so	me busine	esses to close early.
SOUTH DAKOTA, SDZ001>002- 012>014-025>026- 030>032-043- 046>047-049	Hard	ling - Perkins as - Penningto							Central Foot Hills - Custer
	03	0600MST 1900MST			0	0			High Wind (G60)
		vas a large scale				_	_		in the 35 to 45 mph range with gusts
SDZ025		r 70 mph from ' hern Foot Hi		nset in portions	or western	and South	Central Sou	tn Dakota.	
	07	2200MST			0	0			High Wind (G54)
	A cole	2230MST	hrough the r	egion channele	l etrong win	de through	the northern	footbille	Strong winds lifted a 150 by 20 foot
	metal from l	building off of	its slab, up in miniature p	nto the air and conies and chick	lropped it ba ens. Althou	ck to the g gh some o	ground. The f the chicker	building v is were kil	was home to more then 100 animals, led, the majority of the animals were
SDZ013>014-026- 031	Meac	de Co. Plains	- Ziebach	- Central Foo	ot Hills - P	enningto	n Plains		
	10	1100MST 1700MST			0	0			High Wind (G55)
	cold f		with this syst	em moved east	ward through	n the region	n and winds	became vo	ver the western coounties. A strong ery strong around noon, and then died Dakota.
SDZ001>002	Hard	ling - Perkins	3						
	26	0800MST 1400MST			0	0			Heavy Snow
SDZ001>002- 013>014-032	Hard	ling - Perkins	- Meade (Co. Plains - Z	iebach - H	aakon			
0107 01	26 27	1500MST 0400MST			0	0	55K		High Wind (G60)

An intense upper level low pressure system over Minnesota, combined with a Pacific cold front moving into the region, created strong winds and some heavy snowfall over portions of northwestern South Dakota. The heaviest amounts were in the two northernmost counties along the North Dakota border where up to a foot of snow fell. The heavy, wet snow added considerable weight to some of the power lines in those two counties, and when the wind picked up, there were 55 power poles blown over.

		Time	Path	Path	Number of Estimated		February 1999		
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per Killed	sons Injured	Dam Property	age Crops	Character of Storm
TENNESSEE, Centr	al					3	1 3		
Humphreys County	<u></u>								
Waverly	07	0314CST			0	0			Thunderstorm Wind (G50)
D'alassa Casasta	Sherif	f's office repor	rted power lin	es were blown	down in the	eastern par	t of town.		
Dickson County	07	0222000				0			TEL 1 4 TV: 1 (C(0)
Dickson Muni Arpt	07 69 mp	0333CST oh wind gust re		VOS.	0	0			Thunderstorm Wind (G60)
Montgomery County	•		-						
Sango			of strong thu	inderstorm win and smashed in		the shingl	les off some	roofs and	Thunderstorm Wind (G50) I blew down some trees in Sango. A
Robertson County									
4 NE Springfield	07 EMA	0434CST reported struc		to a building at	0 intersection	0 of Youngv	ille and Lake	eview Roa	Thunderstorm Wind (G50) ds.
Sumner County									
Portland	07 EMA	0455CST reported struc		to a building.	0	0			Thunderstorm Wind (G50)
Maury County									
Columbia	09 Sherif	1515CST It's office report		ze hail	0	0			Hail (1.00)
Stewart County	BHCH	rs office repo	rica quarter si	ze nan.					
Dover	11 EMA	1945CST reported trees		ong Creek Roa	0 d.	0			Thunderstorm Wind (G50)
Stewart County		1	, , ,	Ü					
Southeast Portion	11 EMA	2000CST reported trees		n Dover and Ca	0 urlisle.	0			Thunderstorm Wind (G50)
Montgomery County		•							
Shiloh	11 Sherif	2010CST It's department		e size hail acros	0 ss southern p	0 art of the c	county.		Hail (0.75)
Humphreys County									
Waverly	11 Mc Ev	2025CST wen Police De		orted quarter siz	0 e hail.	0			Hail (1.00)
Perry County									
Countywide	11 Sherif	2030CST It's office report		es down across	0 the county.	0			Thunderstorm Wind (G50)
Dickson County									
Dickson	11 SKYV	2053CST VARN spotter		e size hail.	0	0			Hail (0.75)
Wayne County									
Waynesboro	11 Sherif	2059CST It's office report		hail.	0	0			Hail (0.75)
Robertson County									
Springfield	11 EMA	2115CST reported dime			0	0			Hail (0.75)
Coffee County									
Manchester	Center	r also handles	offee County C dispatch calls		forcement, f	ire and am	bulance serv	ices. Eme	Lightning ency 911 calls for about an hour. The rgency calls had to be routed through by lightning.
TENNESSEE, East									
Blount County									
Maryville	09	1715EST			0	0			Hail (0.75)
Blount County Townsend	09	1735EST			0	0			Hail (0.75)

		Time Local/	Path Length	Path Width		Number of Estimated Persons Damage		February 1999	
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm
TENNESSEE, East									
Cocke County									
Countywide	09	1830EST			0	0			Lightning
•									ing power outages in Richland Park,
				Outages were al tored by midni		on the Moi	rristown Higl	nway area	. Around 2000-3000 customers were
TENNESSEE, West	withou	at power. 7th	power was res	tored by midin	Siit.				
Shelby County									
Millington	07	0115CST	,		0	0	10K		Thunderstorm Wind
	A gas	station had its	s awning partia	ally blown off.	A second bu	siness had	its windows	blown out	
Tipton County									
Munford	07	0115CST 0120CST			0	0	5K		Thunderstorm Wind
	Sever	al trees were b							
Dyer County									
Dyersburg	07	0120CST			0	0	10K		Thunderstorm Wind
	Como	0125CST		hloven doven A	fomos vyos	oloo blorro	doven A num	whou of two	and were broadened down on well
Lauderdale County	Some	arummum sc	arrolding was	DIOWII GOWII. F	Tience was a	uso biowii	down. A nui	nber of tre	ees were knocked down as well.
Ripley	07	0130CST			0	0	10K		Thunderstorm Wind
Kipicy	07	0135CST			v	v	1018		Thunderstorm wind
	A bui	lding had its g	utters blown o	ff. Several tree	s were knock	ked down.			
Fayette County									
Oakland	07	0140CST 0150CST			0	0	5K		Thunderstorm Wind
	Sever		were knocked	down.					
Haywood County									
Brownsville to	07	0140CST			0	0	70K		Thunderstorm Wind
Dancyville	A mo	0150CST		industrial park	were destro	wed in Bro	wneville Δ	storage tr	ailer was flipped over and three other
				lle. Trees and p					
Gibson County									
Yorkville	07	0145CST			0	0	25K		Thunderstorm Wind
	A hou	0205CST use lost part of		outbuildings v	vere also dar	naged A f	ew trees wer	e knocked	down
Madison County	71 1100	ise lost purt of	ns roor. Bonk	outounumgs	vere uiso uui	naged. 11 1	ew dees wer	e knocked	down.
Bemis to	07	0200CST			0	0	30K		Thunderstorm Wind
Jackson		0225CST							
				destroyed nea power lines we			vas destroyed	and anot	her lost its roof. A tractor trailer was
Weakley County	KHOCK	ica down. Bev	erar arces and j	sower mies we	ie olowii dov	* 11.			
Martin	07	0200CST			0	0	35K		Thunderstorm Wind
		0205CST	1						
Handaman Carreto	A rad	io and commu	nications ante	nna was blown	down. Sever	ral trees we	ere also knoc	ked down.	
Hardeman County Bolivar	07	021 <i>EC</i> CT	,		0	0	51 7		Th
Bonvar	07	0215CST 0220CST			0	0	5K		Thunderstorm Wind
	Sever	al power lines	were blown d	own.					
Carroll County									
Mc Kenzie to	07	0220CST			0	0	20K		Thunderstorm Wind
Huntingdon	A bat	0240CST ting cage and		were toppled a	and a wood	en fence v	was damaged	l. A large	e machine shed was ripped from its
				lines were kno				8-	
Henderson County									
Sand Ridge	07	0235CST			0	0	5K		Thunderstorm Wind
	A few	0240CST power lines v	vere blown do	wn.					

		Time Path Path Number of Estimated			February 1999				
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per Killed	rsons Injured	Dam Property	age Crops	Character of Storm
TENNESSEE, West			()	(=)				F-	
Carroll County									
Mc Kenzie	11	1900CST			0	0	25K		Thunderstorm Wind
	A soot	1905CST	to a hospital	was destroyed.	A shad was	blown ago	inst a house		
Chester County	A seci	non of the roof	to a nospitai	was destroyed.	A siled was	biowii aga	mst a nouse.		
Henderson	11	1918CST			0	0	0.25K		Hail (1.25)
		1925CST							
Gibson County	27	1440CCT			0	0	0.0117		II-9 (0.75)
Milan	27	1440CST 1445CST			0	0	0.01K		Hail (0.75)
Mcnairy County									
Selmer	27	1740CST			0	0	5K		Thunderstorm Wind
	Severa	1745CST al power poles	were knocke	d down.					
TEXAS, Central									
TEVAC Control Con		E REPORTED.							
TEXAS, Central Sou Harris County	tneast								
Aldine	27	1450CST			0	0	3K		Hail (0.75)
Harris County		1100051			v	v	JK		11an (0.75)
2 W Huffman	27	1515CST			0	0	20K		Hail (1.75)
Waller County									
Hempstead	27	1605CST			0	0	4K		Hail (0.88)
Madison County	25	1610CCT			0	0	1517		TT '1 (1 85)
Midway Colorado County	27	1610CST			0	0	15K		Hail (1.75)
Frelsburg	27	1620CST			0	0	15K		Hail (1.75)
Trinity County									,
Apple Spgs	27	1640CST			0	0	3K		Hail (0.75)
Colorado County									
Columbus Polk County	27	1653CST			0	0	10K		Hail (1.00)
Onalaska	27	1720CST			0	0	3K		Hail (0.75)
Austin County		1720001			v	v	JK		11an (0.75)
Wallis	27	1728CST			0	0	3K		Hail (0.75)
Fort Bend County									
3 W Orchard	27	1735CST			0	0	10K		Hail (1.00)
Wharton County	27	1800CST			0	0	217		II-9 (0.75)
7 NW Egypt San Jacinto County	21	1000051			0	0	3K		Hail (0.75)
Shepherd	27	1845CST			0	0	15K		Hail (1.75)
Polk County									
Lake Livingston Dam	27	1900CST			0	0	15K		Hail (1.75)
Jackson County									
Ganado Liberty County	27	1908CST			0	0	3K		Hail (0.75)
Romayor	27	1908CST			0	0	3K		Hail (0.75)
Matagorda County		17,000,51			v	J	JIX		(U-1)
Bay City	27	1918CST			0	0	10K		Hail (1.00)

		Time	Path	Path		iber of	Estin		February 1999	
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Killed	rsons Injured	Dan Property	Crops	Character of Storm	
TEXAS, Central Sou	theast									
Matagorda County										
Bay City	27	1924CST			0	0	10K		Hail (1.00)	
TEXAS, Extreme Wo	<u>est</u>									
TEXAS, Mid - South		E REPORTED								
	NONI	E REPORTED								
TEXAS, North										
Grayson County										
Whitesboro	06	1850CST	blary sions s	ovva outo thuos	0 tanadra at tha	0 Whiteshoo	10K		Thunderstorm Wind	
Denton County	THUILC	ierstoriii wiiius	biew signs c	own onto three	trucks at the	willesboi	o Autopiex.	•		
Denton Hartlee Arpt	06	1909CST			0	0			Thunderstorm Wind (G50)	
-			was recorded	d at the Denton	Airport. The	gust was f	rom thunder	rstorms in		
Grayson County										
1 SW Denison Grayson County	06	1915CST			0	0			Hail (0.75)	
Denison	06	1925CST			0	0			Hail (0.88)	
Denton County									,	
3 SE Denton	06	1938CST			0	0			Hail (0.75)	
Tarrant County										
South Lake	06	1941CST			0	0			Hail (0.75)	
Denton County	0.5	40 50 CCF								
5 W Lewisville	06 Thunc	1952CST derstorm winds	blew down j	ower lines.	0	0	2K		Thunderstorm Wind	
Collin County										
Frisco	06	1954CST			0	0			Hail (1.75)	
Collin County										
Celina	06 Trees	1955CST were blown do	own from thu	nderstorm winds	0	0	0.50K		Thunderstorm Wind	
Dallas County	11003	were blown de	, wii ii oiii uiu	nacistoriii wina						
Coppell	06	2025CST			0	0	2K		Thunderstorm Wind	
	Power	r lines were blo	own down by	thunderstorm w	inds. Trees	were blown	n down and	a storage b	building was destroyed.	
Dallas County										
Sachse	06	2028CST			0	0			Thunderstorm Wind (G56)	
Hunt County	0.0	2020 <i>C</i> CT			0	0	217		Th	
Wolfe City	06 Thund	2030CST derstorms blew	the roof off	a sheet metal car	orport.	0	2K		Thunderstorm Wind	
Collin County					1					
Farmersville	06	2050CST			0	0			Hail (0.75)	
Rockwall County										
Royse City	06 Power	2055CST r lines were blo	own down fro	m thunderstorm	winds.	0	2K		Thunderstorm Wind	
Hunt County										
Commerce	06	2102CST			0	0			Hail (0.75)	
Hunt County										
Commerce	06	2120CST			0	0			Hail (0.75)	
Hunt County Commerce	ΩZ	2120CST			0	Λ			Thundonstown Wi-1 (C52)	
Commerce	06	2120CS1			U	0			Thunderstorm Wind (G52)	

		Time	Path	Path		ber of	Estimated		February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Per Killed	sons Injured	Dam Property	nage Crops	Character of Storm
TEXAS, North				, , , , , , , , , , , , , , , , , , ,				•	
Lamar County									
Paris	06	2120CST			0	0	0.50K		Thunderstorm Wind
	Thund	derstorm winds	blew down la	arge tree limbs	and a tin roo	f over a do	g run was b	lown off.	
Hopkins County									
Birthright Delta County	06	2135CST			0	0			Hail (0.75)
Pecan Gap Lamar County	06	2155CST			0	0			Hail (0.88)
6 NW Paris	11	0900CST			0	0	5K		Thunderstorm Wind
TEXAS, North Panh		f was blown of	f a mobile ho	me by thunders	storm winds.				
<u>TEAAS, NOLUI T aiii</u>	ianuie								
	NON	E REPORTED							
TEXAS, Northeast									
Bowie County									
5 S De Kalb	06 Barn i	2240CST roof blown in n	niddle of Hwy	y 44.	0	0	25K		Thunderstorm Wind (G57)
Bowie County									
5 S Texarkana	06 Carpo	2305CST ort blown away.			0	0	12K		Thunderstorm Wind (G61)
Bowie County									
3 SW Texarkana	11 Trees	1155CST down at 67 Kin	ns Hwy and F	M 2516 near H	0 Iwy 59.	0			Thunderstorm Wind (G52)
Harrison County									
Jonesville	27	1425CST			0	0			Hail (0.88)
Panola County		1110.000							
Carthage TEXAS, South	27	1449CST			0	0			Hail (0.75)
Cameron County									
9.5 E Port Isabel	11 Two y	1915CST waterspouts sig	hted from a sl	hin	0	0			Waterspout
TEXAS, South Cent				F ·					
Bastrop County									
5 E Bastrop to 10 SE Bastrop	27	1500CST 1510CST			0	0	0	0	Hail (0.88)
Bastrop County									
2 N Smithville to 5 S Smithville	27	1520CST 1540CST			0	0	0	0	Hail (1.75)
Fayette County		4 5 5 0 CC CC							
5 W Muldoon to 7 SW Muldoon	27 Savar	1550CST 1620CST	own trees and	Llarga traa limb	0 os in an area	0 2 miles wi	10K	0 v 10 miles	Thunderstorm Wind
Lavaca County	Seven	c winds oftw u	own nees all	raige nee mill	oo iii aii aica	∠ mmes wi	ac and nearl	y 10 miles	iong in open country.
10 E Halletsville to 15 E Halletsville	27	1725CST 1740CST			0	0	50K	0	Thunderstorm Wind
10 L Imites int	Sever	e winds destroy	ed a barn, an	d took the roof	off several s	mall buildi	ngs.		
Lavaca County									
2 N Halletsville to 10 S Halletsville	27	1730CST 1755CST			0	0	0	0	Hail (1.00)
TEXAS, South Panh	<u>iandie</u>								

NONE REPORTED.

	Ste	orm Da	ta and	Unusi	ual W	eathe	r Phe	nom	ena
		Time Local/	Path Length	Path Width		nber of rsons	Estin Dan		February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm
TEXAS, Southeast									
TXZ182	Newt	on							
	01 11	0000CST 0000CST			0	0	1M		Flood
	The S severa	abine River flo	on the river v	vere completel					Between Burkeville and Bon Weir ged. This was the highest flood level
Tyler County		·	•						
Fred	27	1454CST			0	0			Hail (1.75)
Tyler County									
Warren	27	1454CST			0	0			Hail (1.75)
Tyler County									
Warren TEXAS, West	27	1840CST			0	0			Hail (0.75)
TXZ045>048- 050>052-057>063- 067>070-074>075- 079>082	O1 28 The diprecipobserv	es County Ar n - Reagan - 0000CST 2359CST rought continue itation. The v	nd Upper T Davis Mou d across Wes ast majority land Internat	rans Pecos - ntains - Peco t Texas in Feb of these locati	Our on reported	Winkler of the Valley 0 early all stand no meass	- Ector - M - Marfa P ations in the urable precip	Iidland - lateau - area rece pitation at	Guadalupe Mountains Area - Glasscock - Ward - Crane - Big Bend Area - Terrell Drought iving less than one-tenth of an inch of all. The 0.00 inch of precipitation with no precipitation, with the other
TEXAS, Western No									
TXZ083>090		eman - Foar	d - Wilbarg	ger - Wichita	a - Knox -	Baylor - A	Archer - C	Clay	
	09 10	2200CST 0900CST			0	0			Fog
	Dense autom	fog formed ov obile accidents	were reporte	d including 3	involving c	ars and ser	ni-trucks on	US High	mid-morning of the 10th. Numerous way 287 near Iowa Park in Wichita only a few feet.
TXZ083>090	Hard	eman - Foar	d - Wilbarg	ger - Wichita	a - Knox -	Baylor - A	Archer - C	Clay	
	11	0700CST 1800CST			0	0	0		High Wind
	damag	northwest win	across weste						orth Texas on the 11th. Although no opard Air Force Base in Wichita Falls
UTAH, North, Centr									
UTZ001>003- 005>006-008	Valle		lt Lake De	sert And Mo	ountains/V	Vendover	/Snowville	- Wasat	ountiful - Salt Lake And Toole ach Mountain
	01	0000MST			0	0	0	0	Heavy Snow

0000MST 1200MST

An overnight storm made for an interesting commute along the Wasatch Front, as it brought good amounts of snow to many valley and bench locations and some welcome powder to the mountains. Alta picked up 20 inches, Snowbird 18 and Solitude 10. In the lower elevations Holladay received 7-10 inches, Cottonwood and Centerville 7, with 6 inches in East Layton.

		Time Local/	Path Length	Path Width		Number of Persons		ated age	February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm

UTAH, North, Central and South

UTZ001>027

Cache Valley/Utah Portion - Northern Wasatch Front/Brigham City/Ogden Bountiful - Salt Lake And Toole Valleys - Southern Wasatch Front/Lehi/Provo/Nephi - Great Salt Lake Desert And Mountains/Wendover/Snowville - Wasatch Mountain Valleys/Huntsville/Park City/Heber - Wasatch Mountains I80 North - Wasatch Mountains South Of I80 - Western Unita Mountains - Wasatch Plateau/Book Cliffs - Western Unita Basin - Castle Country/Price/Castle/Dale/Emery - San Rafael Swell/Greene River/Hanksville - Sanpete/Sevier Valleys - West Central Utah/Delta - Southwest Utah/Cedar City/Milford - Central And Southwest Mountains - Southeast Mountains/Canyonlands - Utah'S Dixie And Zion National Park - South Central Utah/Kanab/Escalante - Glen Canyon Recreation Area/Lake Powell - Southeast Utah/Blanding - Eastern Uinta Mountains - Eastern Uinta Basin - Tavaputs Plateau - Grand Flat - Arches/North La Sals

04 0600MST 0 0 Heavy Snow 05 0600MST

Precipitation was widespread across the state as 2 systems merged. The mountains of the state picked up 5-10 inches, with 3-6 inches common over most higher valleys.

UTZ001>002-006>008 Cache Valley/Utah Portion - Northern Wasatch Front/Brigham City/Ogden Bountiful - Wasatch Mountain Valleys/Huntsville/Park City/Heber - Wasatch Mountains I80 North - Wasatch Mountains South Of I80

06 1200MST 0 0 0 0 Heavy Snow 08 1800MST

Another storm brought decent amounts of snow to portions of mainly Northern Utah during a 3-day period. Some of the higher amounts included 23 inches at Beaver Mountain, 20 inches in Park City, 19 inches at Powder Mountain, 15 inches at Snowbasin, 8 inches in Randolph, 6 inches in Wellsville and 4 inches in Logan.

UTZ008 Wasatch Mountains South Of I80

06 1300MST 1 0 0 Avalanche 1330MST

A 22-year-old snowshoer was killed by an avalanche while returning home from an outing with 2 friends in Little Willow Canyon below Lone Peak. As the victim was returning home, the avalanche was triggered as his 2 friends continued climbing the slope. He was buried up to 2 feet under in snow and debris. His body was not found until later that evening.

M22OU

UTZ001 Cache Valley/Utah Portion

07 1800MST 0 0 10K 0 High Wind

Areas of very strong winds were measured on some mountain tops, with 105 mph (91 kts) on Hidden Peak, 95 mph (83 kts) on Germania and 81 mph (70 kts) on Mt. Baldy. Winds estimated at over 50 mph blew the garage roof off of a home in Petersboro in the Cache Valley.

UTZ001>003-005>010-024 Cache Valley/Utah Portion - Northern Wasatch Front/Brigham City/Ogden Bountiful - Salt Lake And Toole Valleys - Great Salt Lake Desert And Mountains/Wendover/Snowville - Wasatch Mountain Valleys/Huntsville/Park City/Heber - Wasatch Mountains I80 North - Wasatch Mountains South Of I80 - Western Unita Mountains - Wasatch Plateau/Book Cliffs - Eastern Uinta Basin

09 1100MST 0 0 100K Winter Storm 10 2200MST

A howling storm with an extremely vigorous cold front blasted through Utah, with hurricane force winds gusts, followed by heavy snow. The storm toppled 2 semi-trucks on I-80 between Tooele and Wendover, tipped over a couple boats on trailers at the Great Salt Lake Marina, and produced widespread power outages across the Wasatch Front. Wind gusts between 80-115 mph were quite common over the mountains, with 40-60 mph over the valleys. Strawberry ridge on Snowbasin recorded 115 mph (100 kts), while 109 mph (95 kts) winds were clocked at Empire Peak at Deer Valley. North Salt Lake recorded a gust to 72 mph (63 kts), with 66 mph (57 kts) In South Jordan, 62 mph (54 kts) at the Salt Lake City International Airport, and 59 mph (51 kts) at Milford.

As far as the snow goes, the mountains picked up 10-20 inches, with the benches getting 4-10 and the valleys 3-8 inches. Even portions of Central and Southwest Utah got snow, with Cedar City and Fillmore picking up 10 inches.

UTZ006>008 Wasatch Mountain Valleys/Huntsville/Park City/Heber - Wasatch Mountains I80 North - Wasatch Mountains South Of I80

16 1200MST 0 0 0 Heavy Snow 17 1800MST

A storm brought some more snow to the mountains, with Brighton picking up 11 inches, Alta and Solitude 10 inches, Beaver Mountain and Powder Mountain 9 inches and Snowbasin 8 inches. The storm brought light rain to the valleys.

		Time Local/	Path Length	Path Width		ber of sons	Estim Dam		February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm

UTAH, North, Central and South

UTZ006>009

Wasatch Mountain Valleys/Huntsville/Park City/Heber - Wasatch Mountains I80 North - Wasatch

Mountains South Of I80 - Western Unita Mountains

18 1200MST 0 0 0 Heavy Snow 19 1200MST

Another snow event for the mountains, with most locations receiving 6-10 inches. Alta and Park City had 9 inches, with 8 inches at Solitude and Deer Valley.

UTZ002-005>009

Northern Wasatch Front/Brigham City/Ogden Bountiful - Great Salt Lake Desert And

Mountains/Wendover/Snowville - Wasatch Mountain Valleys/Huntsville/Park City/Heber - Wasatch

Mountains I80 North - Wasatch Mountains South Of I80 - Western Unita Mountains

21 0900MST 0 0 Winter Storm

22 1800MST

A decent cold front moved through much of Utah with gusty winds and more snow. Strawberry Ridge at Snowbasin recorded a gust to 85 mph (74 kts), with Tooele reporting a gust to 56 mph (49 kts). The mountains picked up another 6-12 inches of fresh powder, while 2-5 inches fell along the Wasatch Front. Some heavier amounts included 11 inches at Alta, Beaver Mountain and The Canyons, 10 inches at Park City, Brighton and Solitude, 5 inches in Holladay, East Milcreek and Spanish Fork, and 4 inches in Bountiful and North Salt Lake.

UTAH, Northeast

NONE REPORTED.

VERMONT, North and Central

VTZ007 Caledonia

12 1500EST 0 0 Record Temperature

The high temperature in St Johnsbury, Vermont reached 53 degrees at 3 PM EST. This broke the old record of 51 set in 1932.

VTZ005 Chittenden

12 1504EST 0 0 Record Temperature

The high temperature at the NWS Burlington, Vermont Office reached 56 degrees at 304 PM EST. This broke the old record of 52

set in 1932.

VTZ008 Washington

12 1510EST 0 0 Record Temperature

The high temperature at the Knapp State Airport in Vermont (MPV) reached 50 degrees at 310 PM EST. This broke the old record

of 46 set in 1984.

VERMONT, South

NONE REPORTED.

VIRGIN ISLANDS

VIZ010-020-030 St. Croix - St. John - St. Thomas

01 0600AST 0 0 15K High Seas

03 0600AST

A strong low pressure system developed north of the region producing large north swells. An associated cold front moved across the U.S. Virgin Islands on February 1. Unusual cooler temperatures were felt ahead of the front with St. Croix reporting 61 degrees on the morning hours on February 1. Large north swells with breaking waves up to twelve feet began to arrive on February 2. In St. Thomas twelve boats either sank of were crushed on the shore.

St. Thomas County

St. Thomas 15 1300AST 0 0 Waterspout

1315AST

Virgin Islands radio reported that a boater sighted three waterspouts north of ST. Thomas moving southeast.

VIRGINIA, East

 Goochland County
 Hadensville
 12
 1630EST
 0
 0
 Hail (0.75)

Powhatan County

Powhatan 12 1650EST 0 0 Hail (1.75)

Storm	Data and	Unusual	Weather	Phenomena
	Data anu	Unusuai	v v caunci	1 IICHUIICHA

		Time Local/	Path Length	Path Width		iber of	Estimate Damage		February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured		Crops	Character of Storm
VIRGINIA, East									
Goochland County									
Crozier	12 Sever	1705EST al trees down.			0	0	2K		Thunderstorm Wind
Hanover County									
Beaver Dam	12 Sever	1720EST al trees down.			0	0	2K		Thunderstorm Wind
New Kent County									
Barhamsville	12 Sever	1818EST al trees down.			0	0	2K		Thunderstorm Wind
Westmoreland County									
Hague Suffolk (C)	12	1830EST			0	0			Hail (0.75)
Suffolk Suffolk (C)	28	1615EST			0	0			Hail (0.75)
Suffolk	28 Large	1615EST tree down bloc	cking Route 4	60.	0	0	1K		Thunderstorm Wind
Portsmouth (C)									
Portsmouth	28	1632EST 1642EST			0	0	5K		Thunderstorm Wind
	Trees	and wires dow	n on 2 houses	S.					
Chesapeake (C)									
Great Bridge Norfolk (C)	28	1645EST			0	0			Hail (0.75)
Norfolk	28 Wind	1650EST gust of 81 mph	reported by	Norfolk Interna	0 itional Airpo	0 ort Tower.			Thunderstorm Wind (G70)

VIRGINIA, Extreme Southwest

NONE REPORTED.

VIRGINIA, North

NONE REPORTED.

VIRGINIA, North	<u>iwest</u>			
VAZ003>004	Dickenson - Buchanan			
	11 1200EST 1700EST	0	0	Record Warmth
	Temperatures reached the 70s during the aft	ernoon. Grundy re	gistered 79 degree	es, while Clintwood saw 74.
VAZ003>004	Dickenson - Buchanan			
	12 1100EST 1500EST Less than 24 hours after temperatures in the	0 70s 2 to 3 inches	0 of anow fall babin	Snow
VAZ003>004	Dickenson - Buchanan	70s, 2 to 3 menes (of show ten benin	d a cold frontal passage.
VA20032004	23 2200EST 24 0400EST One to 4 inches of snow fell, with the upper	0 limit around the Br	0 reaks Interstate Pa	Snow ark.
VAZ003>004	Dickenson - Buchanan			
	25 0700EST 1300EST One to 4 inches of snow fell.	0	0	Snow
VIRGINIA, South	nwest			

VAZ010>016-016 Bland - Giles - Wythe - Pulaski - Montgomery - Grayson - Carroll

0200EST 2100EST 01 0 Winter Storm

		Time Local/	Path Length	Path Width	Number of Persons				February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm

VIRGINIA, Southwest

Snow and sleet developed during the early morning hours of the 1st with accumulations of an inch or less before changing to freezing rain. Freezing rain accumulated 1/4 inch to 1/2 inch before changing to rain in the late afternoon and evening. Some tree limbs were downed due to the icing.

VAZ024	Rockbridge
--------	------------

02 1430EST 0 0 10K **High Wind**

High winds in Glasgow during the afternoon of the 2nd uprooted 2 large trees, tore shingles off the roof of a new house, and a factory. Damage was reported over an area the width of a football field and 1000 feet long.

Martinsville (C)

(-)								
Martinsville	12	1420EST			0	0	2K	Thunderstorm Wind
Rockbridge County								
Glasgow	12	1430EST			0	0	3K	Thunderstorm Wind
Henry County								
5 S Martinsville City	12	1440EST			0	0	2K	Thunderstorm Wind
Pittsylvania County								
3.5 NW Chatham	12	1500EST			0	0	2K	Thunderstorm Wind
	COL	1 . 1 .	1 C	0.1 10.1	1 11		1	

Thunderstorms during the afternoon of the 12th produced damaging winds.

Thunderstorm winds downed trees and power lines in Martinsville, five miles south of Martinsville along route 220, and three and one half miles northwest of Chatham. Trees were downed in Glascow causing damage to an automobile.

WASHINGTON, Northeast

WAZ031-033-Northeast Blue Mountains - Washington Palouse - Northeast Mountains - Okanogan Highlands - East Slopes

037>038-042 **Northern Cascades**

> 02 0500PST 0 **Heavy Snow** 28 2300PST

Heavy snow of 6-15" each day was reported across portions of eastern Washington, especially the mountainous areas. Some sites

included: Chewelah, Newport, Republic, Mazma and Lake Wenatchee. WAZ032>037

Lower Garfield & Asotin - Washington Palouse - Moses Lake Area - Upper Columbia Basin - Spokane Area -

Northeast Mountains

1100PST 4M**High Wind**

1700PST

Strong winds of 30-40 mph with gusts of 60-75 mph roared across portions of eastern Washington. This caused widespread damage to downed trees and power lines along with roof and structure damage from Pullman and Spokane to Ephrata and Ritzville.

WAZ042 East Slopes Northern Cascades

> 10 0800PST 1 1 Winter Storm

Heavy snow, gusty winds and bitter cold temperatures lead to hazardous conditions int he back country of the East Cascades where

2 snowmobilers were lost for 11 days. The couple was found, 1 dead and 1 injuried. F44OU

Whitman County

Pullman 250K 0100PST Flood

> 25 0900PST

Rapid snowmelt and heavy rain lead to rising creeks and streams across Whitman County, which lead to high water levels on the

North Fork of the Palouse River. Several homes and business had reports of flooding.

Lincoln County

Wilbur to 0800PST 20K Flood

0800PST Creston

> Snowmelt and heavy rain caused high water levels on many small stream across northern Lincoln County, including Goose Creek. Portions of Highwy 2 were closed and several business were flooded in downtown Creston.

Spokane County

Dartford 1500PST 500K Flood

27 0200PST

> Heavy rain in addition to snowmelt produced high water levels on the Little Spokane River, where flooding was pronounced near Dartford at the Pine River Park and several roads were under water. Other small streams were running at bankfull, including Rock Creek at Rockford, Hangman Creek and Money Creek near Deer Park.

		Time	Path	Path	Num	ber of	Estimated		February 1999
		Local/	Length	Width	Per	sons	Dam	age	,
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm

WASHINGTON, Northwest

WAZ001-005>006-008>011-016 San Juan - Northwest Interior - Everett And Vicinity - Tacoma Area - Admiralty Inlet Area - Hood Canal/Kitsap Peninsula - Southwest Interior - Central Coast

02 1030PST 0 0 75K 1330PST

Along the coast, sustained winds of 40 mph were reported. The peak gust of 68 mph was reported from Friday Harbor. 60,000 customers were without power and the Hood Canal Bridge was temporally closed. High winds ripped several roofs off buildings, pushed boat houses off their moorings and caused trees to fall on two houses.

High Wind (G59)

High Wind (G65)

WAZ001>002-007-011

San Juan - Western Whatcom - Seattle Metropolitan Area - Southwest Interior

05 1300PST 1700PST

A spotter in Friday Harbor reported wind gusts to 75 mph and one in Issaquah reported a gust to 74 mph. 27,000 customers were without power and there was damage to a Rainier police car from a fallen tree.

11K

WAZ017 West Slopes Northern Cascades And Passes

14 1230PST 2 0 Avalanche

A 19 year old snowboarder died in an avalanche on Mt Baker, while a 25 year old is assumed dead. The body was still buried in deep snow.

M19OU, M25OU

WAZ004 Central Casade Foothills

20 1030PST 0 0 High Wind (G52) 1700PST

A spotter in Enumclaw reported sustained winds of 40 mph with gusts to 60 mph. During the storm, about 10,000 people lost power and a tree fell onto a mobile home just east of Renton.

Clallam County

Sequim 22 0600PST 0 0 100K Heavy Rain

Heavy rain, over a 24 hour period and over the past 4 months, lead to a mudslide that washed out part of Palo Alto Road. The 24 hour rainfall in the area was about 2 inches. In most other areas of Western Washington, record or near record amounts of rain fell in the 4 month period from November to February.

Kitsap County

Silverdale 24 0600PST 0 0 35K Heavy Rain

1800PST

In Kitsap County, up to 5 inches of rain fell during the 24 hr period ending at 10 am. The heavy rain closed roads, caused mudslides, and subsequent flooding damaged a bowling alley in Silverdale.

WASHINGTON, Southeast

WAZ025 East Slopes Southern Cascades

01 2000PST 0 0 Heavy Snow

02 1130PST

Six inches of new snow fell in Roslyn and five inches fell at Snoqualmie Pass overnight.

WAZ030 Northwest Blue Mountains

02 0500PST 0 0 Heavy Snow

1200PST

Eight inches of snow fell at Ski Bluewood during the morning.

WAZ026>029 Kittitas Valley - Yakima Valley - Lower Columbia Basin - Blue Mountain Foothills

02 1000PST 0 0 High Wind (G68)

2350PST

A wind storm moved through eastern Washington causing damage in many locations. Several remote weather stations in Benton County and the Richland Airport reported wind gusts to 68 mph between 930 AM and 300 PM. A van was blown over in Richland at 1130 AM. Wind gusts were estimated to have reached 50 to 70 mph in the Naches and Toppenish areas which blew over power poles and caused outages. Wind blew some paper over a heat lamp which caused a house fire in Toppenish. Twenty firefighters took more than a hour to put the fire out that was fanned by high wind. The house sustained \$75,000 in damage and a litter of puppies died in the blaze. A remote weather station at Hanford reported wind gusts to 78 mph between 3 and 315 PM. There were numerous reports from Walla Walla of blown down tree limbs and power lines. The wind gusted to 48 mph at the Walla Walla airport between 230 PM and 400 PM. Blowing dust and small branches breaking off trees were reported in Richland around 500 PM. In Yakima, numerous trees were blown down, power outages occurred, minor injuries reported, and the wind gusts were estimated between 60 and 70 mph between 6 and 1000 PM. A three foot diameter tree was blown over onto a house. A peak wind gust of 45 mph was reported at the Yakima airport at around 10 PM. At the Ellensburg airport, the peak wind gust was 48 mph at around 1130 PM.

		Time Local/	Path Length	Path Width		ber of sons	Estim Dam		February 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm

WASHINGTON, Southeast

WAZ028 Lower Columbia Basin

06 1200PST 0 0 High Wind (G45)

1400PST
High wind blew power lines together causing around 850 customers in the Touchet area to lose power for several hours.

WAZ025 East Slopes Southern Cascades

06 2000PST 0 0 Heavy Snow

07 0700PST

Twelve inches of new snow fell overnight at Snoqualmie Pass and 1 to 3 inches of new snow fell between Easton and Cle Elum.

WAZ030 Northwest Blue Mountains

16 1800PST 0 0 Heavy Snow

17 0500PST

A weather spotter at Ski Bluewood reported six inches of snow overnight.

WAZ028>029 Lower Columbia Basin - Blue Mountain Foothills

18 0000PST 0 0 High Wind (G45) 0600PST

A low pressure produced damaging wind to the Dayton, Touchet, and Walla Walla areas. Wind gusts to 51 mph were reported at the Walla Walla airport. About 500 people were without power as a result of tree limbs blowing across power lines.

WAZ029 Blue Mountain Foothills

20 2000PST 0 0 High Wind (G40)

21 0400PST

Strong wind caused numerous power outages in the Walla Walla area. Close to 4,000 customers were without power in the

downtown area.

WAZ025 East Slopes Southern Cascades

27 0000PST 0 0 Heavy Snow

1300PST

Eight to ten inches of new snow fell at both White Pass and Snoqualmie Pass from around midnight to noon.

WASHINGTON, Southwest

WAZ021 South Coast

01 1700PST 0 0 High Wind (G35)

02 1700PST

A strong Pacific front caused high winds across the region. Sustained wind speeds reached 40 mph at Cape Disappointment.

WAZ019-021>022-039>040 West Slopes Southern Cascades And Passes - South Coast - Lower Columbia - Vancouver Area - Southern Cascade Foothills

05 1000PST 0 0 25K High Wind (G50)

06 1800PST

One of the stronger Pacific storms of the winter season resulted in damaging winds when it moved over the coastal area and interiors of Northwest Oregon and Southwest Washington. One of the more dramatic events associated with this storm was the destruction of a Keizer, Oregon mobile home when a 200 foot douglas fir tree was toppled by winds and crushed the structure. Many thousands of residents were without power at various times as falling limbs and trees cut power lines. At higher elevations in the Cascade Mountains, very strong wind gusts were reported. Mt. Bachelor ski area reported a wind gust of 120 MPH. Mt Hood Meadows ski area reported a 103 mph wind gust. No injuries were reported. A newspaper reported very strong winds downing trees in the South Washington Cascades. Winds at the higher evelvations were inferred to be in excess of 100 mph at times. The Portland NWS Doppler Radar measured wind speeds at 110 mph at 7000 feet during the height of the storm.

WAZ019-040 West Slopes Southern Cascades And Passes - Southern Cascade Foothills

05 1800PST 0 0 Heavy Snow

07 1500PST

A Pacific weather system dumped large amounts of snow over the Washington and Oregon Cascades. Up to 33 inches of snow were reported (Mt. Hood Meadows Ski Area). Oregon Dept. of Transportation measured 30 inches of snow from this storm at Santiam Pass on Hwy 20. The heavy snow briefly closed roads and made travel across the mountains very difficult.

WAZ021 South Coast

16 1000PST 0 0 10K Flood

1700PST

Extremely heavy swells that were built by storms moving over the Eastern Pacific hit the NW Oregon and SW Washington Coasts. The worst of the damage occurred within 2 hours either side of the high tide times which were around noon.

River traffic on the entire Columbia River system was stalled when ships could not navigate the Mouth of the Columbia River due to extremely dangerous waves breaking at the Columbia River Bar. The Bar was closed between 10:00 AM PST and 8:30 PM PST.

		Time	Path	Path	Num	ber of	Estimated		February 1999
		Local/	Length	Width	Per	sons	Dam	age	•
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm

WASHINGTON, Southwest

WAZ021 **South Coast**

> 1000PST 0 0 High Wind (G39) 18

> 19 0300PST

Another moderate Pacific storm moved over the area and produced a minor wind storm. No damage or injuries were reported. The strongest winds recorded were at Sea Lion Caves where gusts to 58 MPH were clocked. The strongest winds on the Washington

Coast were 45 mph at the Cape Disappointment Coast Guard Station.

WAZ021 **South Coast**

> 1500PST 23 High Wind (G56)

1300PST

High winds associated with a moderately strong Pacific weather system produced strong winds on the coasts of NW Oregon and SW Washington. Astoria Airport ASOS had a gust of 64 MPH. No injuries or damage was reported.

WEST VIRGINIA, East

NONE REPORTED.

WEST VIRGINIA, North

NONE REPORTED.

WEST VIRGINIA, Southeast

NONE REPORTED.

WEST VIRGINIA, West

WVZ046 Pocahontas

> 0100EST 0 0 Winter Storm

0800EST

A quarter to a half inch of ice was deposited by freezing rain, after 1 to 2 inches of snow fell.

WVZ035-037 Raleigh - Nicholas

> 0100EST 0 Ice Storm

0800EST

A quarter to three quarters of an inch of ice was deposited from freezing rain. No widespread power outages were reported.

WVZ005>006 Wayne - Cabell

> 07 1710EST 0 0 Wind

1730EST

Wind gusts of 40 to 50 mph were seen in the wake of a strong cold frontal passage. The Huntington Airport recorded a gust to 48

WVZ005>011-013>020-024>040-

046>047

Wayne - Cabell - Mason - Jackson - Wood - Pleasants - Tyler - Lincoln - Putnam - Kanawha - Roane - Wirt -Calhoun - Ritchie - Doddridge - Mingo - Logan - Boone - Clay - Braxton - Gilmer - Lewis - Harrison - Taylor

- Mcdowell - Wyoming - Raleigh - Fayette - Nicholas - Webster - Upshur - Barbour - Pocahontas - Randolph

1200EST

1700EST

Afternoon temperatures reached well into the 70s across the lowlands, with 60s in the mountains. A few representative maximum readings include 78 degrees at Weston and Creston, 77 degrees at Clay, and 76 degrees at Huntington, Charleston, and Parkersburg.

Clarksburg observed 74 degrees. The 72 degrees at Beckley was a record for the date.

WVZ005>011-013>020-024>040-046>047

WVZ033>037

Wayne - Cabell - Mason - Jackson - Wood - Pleasants - Tyler - Lincoln - Putnam - Kanawha - Roane - Wirt -Calhoun - Ritchie - Doddridge - Mingo - Logan - Boone - Clay - Braxton - Gilmer - Lewis - Harrison - Taylor

- Mcdowell - Wyoming - Raleigh - Fayette - Nicholas - Webster - Upshur - Barbour - Pocahontas - Randolph

Snow

1100EST 1500EST

Less than 24 hours after temperatures in the 60s and 70s, 1 to 3 inches of snow fell behind a cold frontal passage.

Mcdowell - Wyoming - Raleigh - Fayette - Nicholas

0700EST 1300EST

One to 4 inches of snow fell.

WISCONSIN, Extreme Southwest

NONE REPORTED.

		Time Local/	Path Length	Path Width		Number of Persons		ated age	February	1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

WISCONSIN, Northeast

WIZ005-010>013-018>021-030>031-035>038-045-048 Vilas - Oneida - Forest - Florence - Marinette - Lincoln - Langlade - Menominee - Oconto - Marathon -

Shawano - Wood - Portage - Waupaca - Outagamie - Waushara - Winnebago

11 0500CST 1300CST

0 0 Fog

WIZ030-035>039-045-048>049 Marathon - Wood - Portage - Waupaca - Outagamie - Brown - Waushara - Winnebago - Calumet

11 0900CST 1800CST 0 0 Record Warmth

Southerly winds ahead of an approaching cold front brought unseasonably warm and moist air into Wisconsin. Much of central and northeast Wisconsin still had snow on the ground and the warm, moist air moving over the snow-covered ground resulted in widespread dense fog. Near zero visibility was common across much of central and northeast Wisconsin, resulting in numerous vehicular accidents.

New record high temperatures were set at Green Bay (58 degrees), Oshkosh (59 degrees) and Wisconsin Rapids (52 degrees). Wausau tied their high temperature record (48 degrees).

WISCONSIN, Northwest

WIZ001>004-006>009 Douglas - Bayfield - Ashland - Iron - Burnett - Washburn - Sawyer - Price

0600CST

0 Ice Storm

1630CST

Freezing rain and freezing drizzle coated much of northwestern Wisconsin with as much as 1/4 inch of ice. Many traffic accidents were reported, and some schools were closed.

WIZ001>004

Douglas - Bayfield - Ashland - Iron

16 0400CST

0 Heavy Snow

17 0400CST

Heavy lake effect snow fell along the south shore of Lake Superior. Amounts in the 8 to 10 inch range were common, with 12 inches reported at Saxon and 11 inches in Patzau.

WISCONSIN, Southeast

WIZ051-063-066-069 Fond Du Lac - Dane - Milwaukee - Rock

11 1200CST 1700CST 0 0

Excessive Heat

South winds pulled extremely warm, moist air north into southern Wisconsin ahead of a deep low pressure and strong cold front. The city of Milwaukee in Milwaukee County established a new all-time record maximum temperature of 68 degree, breaking the old record of 65 set back in 1976. A new daily record maximum was also established, with the old record of 60 set back in 1932. The city of Madison in Dane County established a new daily record maximum temperature of 61 degrees, breaking the old one being 54 set back in 1932. This narrowly missed the all-time February maximum of 63 set way back in 1882. Janesville in Rock County recorded a new daily maximum temperature of 66 degrees, breaking the old one of 51 set back in 1977. Up in Fond du Lac, a new all-time record maximum of 62 was recorded, breaking the old one of 58 set back in 1996 and 1932.

Lafayette County						
Shullsburg	11	1240CST	0	0	3K	Thunderstorm Wind
Iowa County						
2 SW Mineral Pt	11	1243CST	0	0		Hail (1.75)
Sauk County						
Merrimac	11	1331CST	0	0		Hail (1.00)
Marquette County						
Montello	11	1345CST	0	0		Hail (0.75)
Dane County						
Madison	11	1350CST	0	0	1K	Urban/Sml Stream Fld
		1530CST				
Dane County						
Belleville to	11	1355CST	0	0	10K	Thunderstorm Wind (G56)
Cottage Grove		1410CST				
Columbia County						
Lodi	11	1400CST	0	0		Hail (0.75)

		Time	Path	Path	Numl		Estimated	February 1999
Location	Date	Local/ Standard	Length (Miles)	Width (Yards)	Killed	sons Injured	Damage Property Crop	S Character of Storm
WISCONSIN, South	<u>east</u>							
Green County								
Albany to Brodhead	11	1407CST			0	0	1K	Thunderstorm Wind
Green Lake County								
1 NE Princeton	11	1407CST			0	0		Hail (0.75)
Rock County								
Janesville Jefferson County	11	1417CST			0	0		Hail (0.75)
Lake Mills to Watertown	11	1423CST 1430CST			0	0	1K	Thunderstorm Wind (G56)
Dodge County								
3 N Beaver Dam Milwaukee County	11	1430CST			0	0	10K	Thunderstorm Wind
Milwaukee	11	1430CST 1700CST			0	0	1K	Urban/Sml Stream Fld
Rock County								
Janesville Dodge County	11	1430CST			0	0	1K	Lightning
Juneau	11	1440CST			0	0		Hail (0.75)
Walworth County								
5 ESE Whitewater Jefferson County	11	1440CST			0	0	1K	Thunderstorm Wind
1 S Palmyra	11	1445CST			0	0	1K	Thunderstorm Wind
Walworth County								
Walworth Waukesha County	11	1445CST			0	0	5K	Thunderstorm Wind
Hartland to Elm Grove	11	1445CST 1630CST			0	0	1K	Urban/Sml Stream Fld
Waukesha County								
Hartland to Brookfield	11	1454CST 1505CST			0	0	3K	Thunderstorm Wind (G55)
Fond Du Lac County								
Fond Du Lac to Taycheedah	11	1457CST 1505CST			0	0	4K	Thunderstorm Wind (G56)
Racine County								
Rochester to Racine	11	1510CST 1525CST			0	1	2K	Thunderstorm Wind
Milwaukee County	4.5	4.54.500						
Milwaukee	11	1515CST 1525CST			0	3	25K	Thunderstorm Wind (G61)

Severe thunderstorms, ahead and along a strong cold front, struck parts of southcentral and southeast Wisconsin during the afternoon hours. The characteristic of the severe storms, extremely rare for February, transformed from large hail to damaging winds as clusters changed into short lines of storms moving rapidly east/northeast at 43 knots (50 mph), or more. All-time record February warmth (temperatures in the 60s) along with surface dewpoints in the 50s fueled the storms which also dumped rainfall amounts of 1/2 to 1 inch in 15 to 30 minutes. Thanks to the intense rainfall rate and still frozen ground, urban flooding was reported in Dane (a mudslide was reported on the UW-Madison campus), Waukesha, and Milwaukee counties. Hundreds of trees were uprooted. Probably 200 to 300 power poles toppled over due to powerful gusts to around 61 knots (70 mph), or were brought down by felled trees. In southcentral Wisconsin, 16,000 customers were without electical power at one time or another, while about 4,000 customers in southeast Wisconsin lost power.

Near Shullsburg (Lafayette Co.), the winds destroyed a corn crib and scattered its remains across State Hwy 11. Also near Shullsburg, a large tree was pushed over on top of a pickup truck. Large trees were also uprooted in the Albany to Brodhead area of Green County. In Dane County, a wind damage swath extended from near Belleville northeast through southwest Madison to the east side of Madison around the Beltline. Trees and powerlines were pushed over in this area. The roof of a building on a golf driving range was ripped off, and sheet metal was torn off the siding of a couple other businesses in the Paoli area. East of Madison

		Time	Path	Path	Num	ber of	Estim	ated]	February 1999
		Local/	Length	Width	Per	sons	Dam	age		, , , , , , , , , , , , , , , , , , ,
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

WISCONSIN, Southeast

near Cottage Grove, a semi was blown over, allowing 100 gallons of fuel to spill on I-94.

In Janesville (Rock Co.), lightning struck a school building's chimney, resulting in damage, but luckily no fire. In Jefferson County, wind damage was noted from Lake Mills to Watertown. Besides many toppled trees, several construction sites in Watertown reported damage to scaffolding. Tree damage was also noted just south of Palmyra. In Walworth County, the powerful winds knocked over 2 construction trailers and 3 semi's near the village of Walworth. Large trees were also pushed over by the winds east/southeast of Whitwater.

The southern part of the city of Milwaukee in Milwaukee County was raked by powerful winds. Many trees and power poles were pushed over. A van was blown over, injuring two people. Also in Milwaukee, a women was injured when the winds knocked her down. It was the nearly the same story in Cudahy which reported damage to several homes, businesses, and vehicles. In Racine County, the winds toppled trees and power lines in a swath from Rochester east to the city of Racine. In the city of Racine, a man was injured when a large tree branch knocked him out of his wheel chair.

Wind damage in Waukesha County occurred in the area from Hartland to Pewaukee. Besides damage to trees and powerline, a shed in Pewaukee was destroyed. The shed's wind-driven debris then damaged a nearby car. Further northwest in Dodge County, the powerful winds near Beaver Dam ripped off a barn's roof. In Fond du Lac county, the winds toppled trees and power poles/lines from Fond du Lac northeast to Taycheedah.

WISCONSIN, Southwest

NONE REPORTED.

WISCONSIN, West

NONE REPORTED.

WYOMING, Central and West

WYZ004-010- Cody Fo 014>015-022-024- Southeas

Cody Foothills - Dubois - Green Mountains - Natrona - Rock Springs/Green River - Flaming Gorge -

Southeast Big Horn Mountains

027

0 0 High Wind (G81)

2100MST

WYZ028 East Johnson

99 1200MST 0 0 High Wind (G70)

2300MST

High winds in the Buffalo area caused some property damage; estimates unavailable. Times estimated.

WYZ015-022>023 Natrona - Rock Springs/Green River - Red Desert

10 0100MST 0 0 Winter Storm

1300MST

Brief, intense storm dropped from 6 inches to a foot of new snow.

WYOMING, Extreme Southwest

NONE REPORTED.

WYOMING, North Central

WYZ098 Northeast Bighorn Mountains

21 2100MST 0 0 Heavy Snow

22 0700MST

A Pacific low pressure system brought heavy snowfall to the Northeast Big Horn Mountains of Wyoming as it tracked east across Southern Montana. 8 inches of snow fell in Burgess Junction with this system.

WYOMING, Northeast

WYZ054>058 Gillette - South Campbell - Moorcroft - Wyoming Black Hills - Weston

02 1900MST 0 0 High Wind (G75)

03 1300MST

A large scale storm system pushed into the region creating strong winds throughout all of Wyoming. The peak gust in Northeastern Wyoming was at Devils Tower which had an 86 mph gust.

		Time Local/	Path	Path Width	Numb Pers		Estima		February 1999			
Location	Date	Standard	Length (Miles)	(Yards)	Killed	Injured	Dama Property	Crops	Character of Storm			
WYOMING, Southe	east											
WYZ059>063-		erse - Niobr	ara - South	west Carbon	- North Ca	arbon - S	Snowy Ran	ge - Lar	amie Valley - Laramie Range -			
065>070	Platte	e - Goshen -	Cheyenne l	Foothills - Pi	ne Bluffs							
	02 03	0430MST			0	0	148K	0	High Wind (G81)			
	West winds were sustained at 35 to 45 mph across all of southeast Wyoming with gusts as high as 85 mph. Dozens of trailers were											
	blown over on Interstate 25 north of Cheyenne, and on Interstate 80 west of Laramie. A record wind gust for the month of February											
	was reported at the National Weather Service Office in Cheyenne. Many billboards, power lines, trees and awnings were blown down around the city. A gas station canopy was also ripped off by the winds.											
	In Wheatland, trees were blown down and a barn was destroyed by the winds.											
		In Converse County, the winds damaged house siding, roof shingles and vehicle windows. a semi-trailer was overturned on Interstate 25 between Douglas and Glenrock. Winds in this area were sustained at 35 to 50 mph, with gusts to 60 mph.										
WYZ063>064-			U	nie Range - L								
066>067-069	SHOW	y Kange - Iv	oi tii Lai aii	ne Kange - L	ai aiiic Ka	nge - 1 ia	itte - Cheyt	cinic ro	otimis			
	06	1223MST			0	0	0	0	High Wind (G60)			
	07	1907MST		25 / 45 1	24	. 70						
WYZ061	_	west to south		35 to 45 mpn,	with gusts up	to /U mp	n occurred in	tne soutr	neast mountains and adjacent plains.			
W 1 Z001	30uu 11	oooomst			0	0	30K	0	XXI:4 C4			
	11	1200MST			U	0	30K	U	Winter Storm			
		A winter storm dumped 8 to 12 inches of snow across southwest Carbon County. In addition, strong winds overturned 10 semitrailers along Interstate 80 in Carbon County.										
WW70/2 0/7 0/0		Ü		•								
WYZ063-067-069		-	_	enne Foothil		0	0	0	W 1 W 1 (C51)			
	17	1500MST 2100MST			0	0	0	0	High Wind (G51)			
		A brief period of strong west to northwest winds of 35 to 45 mph, with gusts up to 60 mph occurred in the southeast mountains and										
WW.77075.050		nt plains.	CI	741.911 D*	. Dl. cc.							
WYZ067>070			•	Foothills - Pi					W. I. W. 17650			
	22	0435MST 1800MST			0	0	0	0	High Wind (G54)			
	Strong			30 to 45 mph,	with gusts up	to 60 mpl	h occurred ac	ross the p	plains east of the Laramie Range.			
WYZ063-067	Snow	y Range - P	latte									
	23	0200MST			0	0	0	0	High Wind (G61)			
WYZ067	Platte	1200MST										
VV 1 2007	26	0920MST			0	0	0	0	High Wind (G63)			
	20	1550MST			U	U	U	U	riigii wiiid (G03)			
	-			h with gusts up	to 70 mph oc	ccurred ac	ross Platte Co	ounty.				
WYZ064-067	North	n Laramie R	ange - Plat	te								
	28	1000MST			0	0			High Wind (G56)			
		1515MST										

		Time	Path	Path	Numb		Estim		December 1998	
		Local/	Length	Width	Pers	ons	Dam	age	Becomeer 1996	
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

ADDITIONS/CORRECTIONS

MICHIGAN, West

Jackson County

Spring Arbor 06 1510EST 0 0 2K Thunderstorm Wind

A weather spotter reported 2 large trees were downed in Spring Arbor.

Jackson County

Jackson 06 1515EST 0 0 5K Thunderstorm Wind

The Jackson County Sheriff's Department reported 5 trees were downed in the city of Jackson.

MIZ037>039-043>045-050>051-056>059-064>067-071>074 Mason - Lake - Osceola - Oceana - Newaygo - Mecosta - Muskegon - Montcalm - Ottawa - Kent - Ionia - Clinton - Allegan - Barry - Eaton - Ingham - Van Buren - Kalamazoo - Calhoun - Jackson

21 1300EST 0 0 Lake Effect Snow

22 1800EST

The winter season's first widespread snowfall came in the form of lake effect snow showers which developed behind an arctic cold front which moved across western Lower Michigan during the afternoon and early evening hours of Monday, December 21st. Snow showers continued until the late afternoon hours of December 22nd. Snowfall totals ranged from 1 to 5 inches in the listed counties. The highest snow amounts were reported from the counties adjacent to Lake Michigan, with an average of 3 to 5 inches reported in Lake, Mason, Oceana, Muskegon, Ottawa, Allegan, and Van Buren Counties. As is typically the case in this area, the first snow of the season contributed to a dramatic increase in the reported number of traffic accidents. Most of the accidents were minor, however one fatal accident in Allegan County was blamed on hazardous road conditions. A 35-year old male was killed when he lost control of his sport utility vehicle on northbound I-196 near Saugatuck in Allegan County. The vehicle left the road and smashed into a tree.

The most snow reported from this event was 5.1 inches in Allegan. Other snowfall reports included 5.0 inches in Bloomingdale (Van Buren County), 4.2 inches in Grandville (Kent County), 3.5 inches in Holland, 3.0 inches at the Kent County International Airport in Grand Rapids, 2.5 inches in Hastings (Barry County), and 1.5 inches in Big Rapids (Mecosta County).

MIZ037-043-050

Mason - Oceana - Muskegon

29 1900EST 0 0 Lake Effect Snow

30 1900EST

MIZ064-071 Allegan - Van Buren

29 1900EST 0 0 Heavy Snow

30 0700EST

A heavy lake effect snow band moved onshore across southwest Allegan County and western Van Buren County around 7:00 pm EST on Tuesday, December 29th. The snow band remained nearly stationary until dissipating around 5:00 am EST on December 30th. However, additional light lake effect snow showers moved across the 2 counties through the day of the 30th. In Allegan County, the heaviest snow fell across Ganges and Casco Townships, affecting the towns of Ganges, Glenn, and Kibbie. Glenn reported 6 inches of snow ending at 5:00 am EST from the snow band. In Van Buren County, the heaviest snow fell along a north-south oriented axis which extended from South Haven to Watervliet (in Berrien County). Along this axis, snowfall averaged 6 to 12 inches. Specific totals included 8 inches in South Haven and 14 inches in Covert.

Strong northerly winds brought arctic air south across the warmer waters of Lake Michigan on the night of Tuesday, December 29th and into the day of December 30th, resulting in lake effect snow showers along the immediate lake shore communities of the above-mentioned counties. One very heavy lake effect snow band (or snow squall) developed over eastern Lake Michigan and moved onshore across southwest Allegan County and western Van Buren County on the evening of the 29th and remained nearly stationary until dissipating between 5:00 and 7:00 am EST on the morning of the 30th. See above details for snowfall totals under this band. Elsewhere, snowfall totals in the listed counties averaged 1 to 3 inches. Specific snowfall reports included 4 inches in Bloomingdale (Van Buren County); 3 inches in Ludington and Scottville (Mason County), 3 miles NE of Pentwater (Oceana County), and Whitehall (Muskegon County); and 2 inches in Bangor (Van Buren County), Pullman (Allegan County), Little Sable Point (Oceana County), and North Muskegon (Muskegon County).

MIZ056>057-064>065-071 Ottawa - Kent - Allegan - Barry - Van Buren

31 0700EST 0 0 Lake Effect Snow 2359EST

Lake effect snow showers moved onshore across portions of western Lower Michigan on the morning of Thursday, December 31st, 1998. Snow showers persist through midnight. As of late Thursday evening before midnight, snowfall totals averaged 3 to 5 inches across the listed counties. Several minor traffic accidents were attributed to hazardous road conditions during the late afternoon and evening hours. Specific snowfall reports included 6 inches in Bloomingdale (Van Buren County), 4 inches in Allegan and Grandville (Kent County), 3.5 inches in Holland, 3 inches in Grand Haven and Hastings, and 2.8 inches at the Kent County International Airport in Grand Rapids.

		Time	Path	Path	Numb		Estim		December 1998	
		Local/	Length	Width	Pers	ons	Dam	age	Becomeer 1996	
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

ADDITIONS/CORRECTIONS

NEW MEXICO, Southeast

NMZ027>029

Guadalupe Mountains Of Eddy County - Eddy County Plains - Lea

01 0000MST 0 0 2M 12M Drought

31 2359MST

The devastating drought continued into the Winter with little precipitation reported around the region in December. The estimated damage totals are for calendar year 1998.

NMZ029

Lea

11 0530MST 0 0 Heavy Snow

A strong upper level storm system interacted with copious amounts of Gulf and Pacific moisture to produce a heavy snow event across portions of Southeast New Mexico and West Texas. This storm system moved from west to east across the area with snowfall amounts up to 11 inches in southern Lea County. The closest official recording station at Midland International Airport, Texas set new records for the greatest daily snowfall, the greatest single event snowfall, and the greatest monthly amount with the total of 9.75". Numerous traffic accidents were reported on icy roads with a few injuries. The heavy snowfall also resulted in loss of power for some communities.

TEXAS, West

TXZ045>048-050>052-057>063-067>070-074>075-079>082 Gaines - Dawson - Borden - Scurry - Andrews - Martin - Howard - Van Horn/Guadalupe Mountains Area - Reeves County And Upper Trans Pecos - Loving - Winkler - Ector - Midland - Glasscock - Ward - Crane - Upton - Reagan - Davis Mountains - Pecos - Presidio Valley - Marfa Plateau - Big Bend Area - Terrell

01 0000CST 0 0 15M 250M Drought 31 2359CST

The devastating drought continued into the Winter with little precipitation reported around the region in December. The estimated damage totals are for calendar year 1998.

TXZ050>052-058>063-067>068-074-079 Andrews - Martin - Howard - Reeves County And Upper Trans Pecos - Loving - Winkler - Ector - Midland - Glasscock - Ward - Crane - Davis Mountains - Presidio Valley

11 0200CST 0 0 Heavy Snow 1600CST

A strong upper level storm system interacted with copious amounts of Gulf and Pacific moisture to produce a heavy snow event across portions of Southeast New Mexico and West Texas. This storm system moved from west to east across the area with snowfall amounts up to 12 inches in western Reeves County. This turned out to be the snow storm of the century for the Midland/Odessa area as the 9.75 inches recorded at the Midland International Airport set new records for the greatest daily snowfall, the greatest single event snowfall, and the greatest monthly snowfall ever recorded. Most of this snow fell in an intense 4-5 hour period. Numerous traffic accidents were reported on icy roads with a large number of injuries and one fatality. The heavy snowfall also resulted in loss of power for some communities.

		Time	Path	Path	Numb	per of	Estim	ated		January 1999
		Local/	Length	Width	Pers	sons	Dam	age		January 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

ADDITIONS/CORRECTIONS

CONNECTICUT, Southern

CTZ005>006

Northern Fairfield - Northern New Haven

With cold air in place along the surface, as a strong low pressure system moved northeast across the Great Lakes, a second low formed over the Mid-Atlantic States and moved northeast across Long Island during Sunday afternoon, January 3rd.

Light freezing rain was intermittent as it began just after 2 am on Sunday. It became widespread and steady by Sunday morning. At least one-half inch of liquid rain fell with temperatures at or below the freezing mark by the times indicated above. Widespread significant icing occurred across the region. Ice accumulated up to 1 inch on trees and power lines across extreme northern parts of Fairfield County, north of Danbury.

Fairfield County					
South Port	03	1119EST 1300EST	0	0	Urban/Sml Stream Fld
New Haven County					
South Portion	03	1158EST 1500EST	0	0	Flood
New Haven County					
Woodbridge	03	1158EST	0	0	Flood
New London County					
Norwich	03	1303EST	0	0	Flood

With cold air in place along the surface, as a strong low pressure system moved northeast across the Great Lakes, a second low formed over the Mid-Atlantic States and moved northeast across Long Island during Sunday afternoon, January 3rd.

A light intermittent mix of sleet and freezing rain began around 3 am on Sunday. As an icy coating developed on road surfaces below freezing, some significant traffic accidents occurred across the region through Sunday morning.

However, as southeast winds increased, gusting to around 45 mph, surface temperatures quickly rose above freezing from the immediate coast north and west during Sunday morning. An intense narrow band of torrential rain developed within a large area of steady rain. Rain fell on a frozen ground surface at rates as high as 3 inches per hour. This resulted in rapid runoff that caused serious widespread flooding of low-lying and poor drainage areas.

In New London County, water accumulated to around 2 feet on streets in Norwich and at the intersection of New London Turnpike and Fitch Hill Road. In Griswold, a road was washed out and stranded residents of the McClough Manor Old Age Home.

Here are selected rainfall amounts across the region:

- o In Fairfield County, from 2.26 inches at Danbury to 2.83 inches in Bridgeport.
- o In New Haven County, from 1.99 inches at New Haven to 4.30 inches at Ansonia. A spotter measured 4.20 inches in 3 hours at Ansonia. The maximum rainfall rate at the Beecher Road School Weather Station in Woodbridge was 2.48 inches per hour.
- o In New London County, from 1.56 inches at Groton to 2.53 inches at Jewett City.

In addition, minor tidal flooding occurred along the coast from Milford east to Waterford during the late morning and afternoon high tides.

Fairfield County					
Greenwich to Stratford	15	1000EST	0	0	Flood

		Time	Path	Path	Numb	per of	Estim	ated		January 1999
		Local/	Length	Width	Pers	sons	Dam	age		January 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

ADDITIONS/CORRECTIONS

CONNECTICUT, Southern

New Haven County				
New Haven	15	1000EST	0	0
Fairfield County				
Danbury	15	1100EST	0	0
Middlesex County				
Countywide	15	1100EST	0	0
New Haven County				
Waterbury to	15	1100EST	0	0
Meriden				
New London County				
Countywide	15	1100EST	0	0

A combination of heavy rain falling on frozen ground, snow and ice melting, and partially clogged storm drains, caused widespread flash flooding of low-lying and poor drainage areas across the region.

In Fairfield County, up to 3 feet of water collected under road overpasses in Bridgeport. Widespread and significant street flooding also occurred in Stamford, Norwalk, and Stratford as well as in Danbury.

In New Haven County, significant widespread street and basement flooding occurred in New Haven, Hamden, Waterbury, and Meriden.

In New London County, up to 4 feet of water collected along the Rte. 2/32 connector and 2 feet of water ponded along parts of Glenn Street and Rte. 165 in Montville. Widespread street flooding was reported in Norwich.

Rainfall amounts ranged from 0.86 inches at Groton to 1.56 inches at Madison.

Icing also occurred across the region from January 14th through the early morning hours of the 15th. It downed scattered tree limbs that resulted in scattered power outages.

	F	airfi	eld	County
--	---	-------	-----	--------

Greenwich to Bridgeport New Haven County	18	1755EST	0	0	Thunderstorm Wind (G52)
Naugatuck	18	1815EST	0	0	Lightning
New Haven County					
Waterbury	18	1817EST	0	1	Lightning

Thunderstorms and heavy showers occurred ahead of an approaching cold front. They caused a brief period of high winds and torrential rain.

High winds toppled several tree limbs onto power lines from Greenwich to Bridgeport. Many power outages were reported.

Lightning struck a house on Osborn Road in Naugatuck. It entered the house through a telephone line and did some damage to a computer inside. Lightning also struck a house at 64 Keefe Street in Waterbury. A 42 year old man in the garage suffered second-degree burns on his hands. The lightning left a burn mark on the back of the house.

Torrential rain caused minor flooding of low-lying and poor drainage areas that included streets and basements.

New Haven County Wallingford

24 1355EST 0 0 Flood

Wet antecedent conditions (high stream flows) combined with a 1 to 2 inch heavy rainfall caused flash flooding of the Quinnipiac River at Wallingford.

		Time	Path	Path	Numb	per of	Estim	ated		January 1999
		Local/	Length	Width	Pers	sons	Dam	age		January 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

ADDITIONS/CORRECTIONS

				1011270	·		0110	
LOUISIANA, North	<u>east</u>							
Morehouse Parish								
Bastrop	21	1835CST			0	0		Hail (1.00)
Morehouse Parish								
Bonita	21	1914CST			0	0		Hail (1.00)
Morehouse Parish								
3 N Bonita to 5 NE Jones	21	1915CST 1924CST	7	200	0	0	20K	Tornado (F1)
		tornado crossed ir blown down.	ito Ashley C	ounty, Arkans	as. Roofing	g was torn	off of a house ne	ar Jones. Numerous trees and power lines
West Carroll Parish								
2 S Kilbourne	21 Sever	1945CST ral trees were blow	2 vn down.	50	0	0	5K	Tornado (F0)
Catahoula Parish								
Countywide	21 Trees	2030CST and power lines v	were blown d	lown across the	0 e county.	0	10K	Thunderstorm Wind
East Carroll Parish								
Lake Providence	21 Nume	2030CST erous trees and po	wer lines we	re blown dowr	0	0	5K	Thunderstorm Wind
Catahoula Parish								
1 NE Aimwell	21 Torna	2107CST ado was spotted by	1 y local law ei	50 nforcement in a	0 an open fiel	0 ld.		Tornado (F0)
Franklin Parish								
Gilbert	21	2145CST	1	40	0	0		Tornado (F0)
Franklin Parish								
4 ESE Wisner to 4 SE Lorelein	21	2145CST 2200CST	8	50	0	0	5K	Tornado (F1)
	A fev	v trees and power	lines were bl	own down. Th	nis tornado	continued	into Tensas Parish	1.
Catahoula Parish								
Harrisonburg	21	2200CST	1	50	0	0	10K	Tornado (F1)
		nouse received mi eximately ten trees		_	one storag	e snea wa	s damaged. A thi	rty foot tall antenna was blown down and
Tensas Parish	-FF							
6 SW New Light to 5 NE Tensas Bluff	21	2200CST 2215CST	14	440	0	0	500K	Tornado (F3)
	snapp	mbined fifty hous	shing boat w	as wrapped are	ound a tree	. Many co		Hundreds of trees were either downed or flipped over several times. Vehicles were
Tensas Parish								
Newellton	21 Nume	2215CST erous trees were b	lown down.		0	0	5K	Thunderstorm Wind
Madison Parish								
3 S Tallulah to 2 NE Ashley	21	2230CST 2250CST	10	100	0	0	200K	Tornado (F1)
	toppl	ed. Many trees w	ere uprooted	or split. A la	rge road si	gn and a t	elevision antenna	ah. Five power transmission towers were were bent over by winds. Shingles were is tornado continued into Warren County

MISSISSIPPI, Central

Mississippi.

Warren County

7 SW Eagle Bend to 21 2252CST 6 50 0 0 5K Tornado (F0) 1 S Eagle Bend 2315CST

Several trees were blown down. This tornado moved out of Madison Parish, Louisiana.

		Time	Path	Path Number of Estimated		ated	January 1999			
		Local/	Length	Width	Pers	sons	Dam	age		January 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

ADDITIONS/CORRECTIONS

NEBRASKA, Centra	al	entr	Ce	Α.	SK	RA	₹B	NI	
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NEBRASKA, Centra	<u>ıl</u>				
NEZ007	Boyd				
	01 02 Snowt	1200CST 1200CST fall of 7.0 inches in 24 hours near Lynch.	0	0	Heavy Snow
NEW JERSEY, Nort	<u>heast</u>				
Union County					
Countywide	03	0945EST	0	0	Urban/Sml Stream Fld
Essex County					
Countywide	03	0950EST	0	0	Urban/Sml Stream Fld
Bergen County					
Countywide	03	0955EST	0	0	Flood
Hudson County					
Countywide	03	1000EST	0	0	Urban/Sml Stream Fld

With cold air in place along the surface, as a strong low pressure system moved northeast across the Great Lakes, a second low formed over the Mid-Atlantic States and moved northeast across Long Island during Sunday afternoon, January 3rd.

A light intermittent mix of sleet and freezing rain began just before midnight on Sunday. As an icy coating developed on road surfaces below freezing, some significant traffic accidents occurred across the region from midnight through 3 am. The most significant multi-vehicle accident occurred on Rte. 80 in South Hackensack (Bergen County) around 2:30 am.

However, as southeast winds increased, gusting from 45 to 50 mph, surface temperatures quickly rose above freezing from the immediate coast west during the night. An intense narrow band of torrential rain developed within a large area of steady rain. Rain fell on a frozen ground surface at rates as high as 3 inches per hour. This resulted in rapid runoff that caused widespread flooding of low-lying and poor drainage areas. In Fort Lee (Bergen County), mudslides were reported along Route 4 that disrupted traffic. Strong gusty winds also downed tree branches in Roselle (Union County).

Here are selected rainfall amounts across the region:

- o In Bergen County, from 1.01 inches at Franklin Lakes to 2.67 inches at Ridgewood. At Teterboro, 2.36 inches was measured. At the Harrington Park School Weather Station, the maximum rainfall rate was measured at 3.48 inches per hour.
- o In Essex County, from 1.69 inches at Essex Fells to 3.18 inches at Verona. At Newark Airport, 2.57 inches was measured.
- o In Union County, 2.12 inches was measured at Elizabeth.
- o In Hudson County, 2.51 inches was measured in Harrison.

NJZ002>006-011

Western Passaic - Bergen - Eastern Passaic - Essex - Hudson - Union

15	0430EST	0	0	Winter Storm
	1230EST			

As a strong high pressure system moved east-southeast just north of Northern New England, a low pressure system developed southwest of the area.

A narrow band of light freezing rain changed to sleet and snow with the passage of an arctic cold front during Wednesday afternoon, January 13th. Northeast winds transported a cold shallow airmass that caused temperatures to fall from the 50s into the 20s within 6 hours of its' passage.

A 12 to 18 hour period of light snow preceded the developing storm as warmer air was forced above the cold arctic airmass. Wind chills ranged from 15 to 25 degrees below 0 as northeast winds of 15 to 25 mph combined with temperatures in the teens along the coast and from 0 to 10 degrees above 0 inland.

As the low developed, warmer air was drawn into the system causing the snow to mix with sleet and freezing rain. A prolonged

		Time	Path	Path	Numl	ber of	Estim	ated		Ianuary 1000
		Local/	Length	Width	Pers	sons	Dam	age		January 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

ADDITIONS/CORRECTIONS

NEW JERSEY, Northeast

period of freezing rain occurred across Northeast New Jersey. Significant icing caused widespread disruptions to mass transit and traffic. It also accumulated on trees and power lines and caused significant power outages across Passaic, Western Essex and Union Counties and Northwest Bergen County.

In Newark, a heavy rain shower produced wind gusts from 30 to 40 mph around 7:50 am. This downed additional ice-laden tree branches and power lines. Two Emergency Medical Technicians were trapped in their ambulance by downed power lines.

15	0925EST		0	0		Flood
15	0930EST		0	0		Flood
15	0950EST		0	0		Flood
15	0950EST		0	0		Flood
	15 15	15 0930EST 15 0950EST	15 0930EST 15 0950EST	15 0930EST 0 15 0950EST 0	15 0930EST 0 0 15 0950EST 0 0	15 0930EST 0 0 15 0950EST 0 0

A combination of rain falling on frozen ground, snow and ice melting, and partially clogged storm drains, caused flash flooding of low-lying and poor drainage areas across the region.

In Newark, parts of Rte. 22 were flooded. Parts of the Meadowlands Parkway in Secaucus were closed due to flooding. In Lodi, a section of Route 46 was flooded. In West Paterson, dozens of intersections (including parts of Rte. 80) were under at least 1 foot of water.

Rainfall amounts of 1.00 inch was measured at both Caldwell and Teterboro.

Bergen County					
Teaneck	18	1530EST	0	0	Lightning
Bergen County					
Woodridge	18	1740EST	0	0	Thunderstorm Wind (G50)
Union County					
North Plainfield	18	1740EST	0	0	Thunderstorm Wind (G50)
Bergen County					
Lodi	18	1945EST	0	0	Flood

Thunderstorms and heavy showers occurred ahead of an approaching cold front.

Lightning struck a house on Alpine Drive in Teaneck that ignited a fire. Significant and substantial damage occurred.

Thunderstorms produced a brief period of high winds and torrential rain. High winds downed tree limbs and power lines in Union and Bergen Counties. Torrential rain caused mainly minor flooding. However, at Lodi and Ho-Ho-Kus, streams overflowed their banks. The Saddle River at Lodi was above flood stage until around 3:00 am on January 19th. It crested around six-tenths of a foot above flood stage at 11:40 pm on January 18th.

NEW YORK, Coastal

NYZ067>068 Orange - Putnam

With cold air in place along the surface, as a strong low pressure system moved northeast across the Great Lakes, a second low formed over the Mid-Atlantic States and moved northeast across Long Island during Sunday afternoon, January 3rd.

Light freezing rain was intermittent as it began just after midnight on Sunday. It became widespread and steady by Sunday morning. At least one-half inch of liquid rain fell with temperatures at or below the freezing mark by the times indicated above.

		Time	Path	Path Number of Estimated		ated	January 1999			
		Local/	Length	Width	Pers	sons	Dam	age		January 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

ADDITIONS/CORRECTIONS

NEW YORK, Coastal

Widespread significant icing occurred across the region.

Rockland County						
Countywide	03	1030EST	0	0		Urban/Sml Stream Fld
Richmond County						
Countywide	03	1055EST	0	0		Heavy Rain
New York County						
Countywide	03	1100EST	0	0		Heavy Rain
Bronx County						
Countywide	03	1105EST	0	0		Urban/Sml Stream Fld
Westchester County						
Countywide	03	1110EST	0	0		Urban/Sml Stream Fld
Nassau County						
Countywide	03	1127EST	0	0		Flood
Suffolk County						
West Central Portion	03	1210EST	0	0		Flood
Suffolk County						
Eastside	03	1300EST	0	0		Heavy Rain
Kings County						
Countywide	03	1318EST	0	0		Flood
Queens County						
Countywide	03	1318EST	0	0	500K	Flood

With cold air in place along the surface, as a strong low pressure system moved northeast across the Great Lakes, a second low formed over the Mid-Atlantic States and moved northeast across Long Island during Sunday afternoon, January 3rd.

A light intermittent mix of sleet and freezing rain began just after midnight on Sunday. As an icy coating developed on road surfaces below freezing, some significant traffic accidents occurred across the region from midnight through 3 am.

However, as southeast winds increased, gusting from 45 to 50 mph, surface temperatures quickly rose above freezing from the immediate coast west during the night. An intense narrow band of torrential rain developed within a large area of steady rain. Rain fell on a frozen ground surface at rates as high as 3 inches per hour. This resulted in rapid runoff that caused widespread serious flooding of low-lying and poor drainage areas mainly from Kings County east across Central Suffolk County. Life-threatening flash flooding occurred in a 30 block area of Springfield Gardens (Queens) where people required rescue from their flooded basement apartments. Water rose to within 6 inches of the ceilings in several apartments. Many locations along the Belt and Southern State Parkways, the Long Island Expressway, and Northern State Parkway were closed due to serious flooding.

Here are selected rainfall amounts across the region:

- o In Nassau County, from 3.69 inches at Sea Cliff to 5.02 inches at Merrick.
- o In Western and Central Suffolk County, from 2.86 inches at Sayville to 4.51 inches at Farmingdale.
- o In Queens County, from 2.53 inches at LaGuardia Airport to 3.78 inches at Kennedy Airport.
- o In Manhattan, a new daily record of 2.42 inches was measured at Central Park.
- o In Westchester County, from 1.67 inches at Yorktown Heights to 2.84 inches at White Plains.
- o In Eastern Suffolk County, from 1.08 inches at Montauk to 2.38 inches at Westhampton.
- o In Rockland County, 2.23 inches was measured in Suffern. Rainfall rates of 2.44 inches per hour was measured at the Clarkstown North HS Weather Station in New City and 2.28 inches per hour at the Felix Festa MS Weather Station in West Nyack.

		Time	Path	Path	Numl	ber of	Estim	ated		January 1999
		Local/	Length	Width	Pers	sons	Dam	age		January 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

ADDITIONS/CORRECTIONS

NEW YORK, Coastal

Strong gusty winds combined with heavy rain caused scattered power outages as tree limbs fell mainly from Nassau County east across Central Suffolk County.

NYZ067	Orange
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09 0654EST 0 0 Winter Storm

Snow developed just before noon on Friday, January 8th. It changed to freezing rain during Friday evening. Ice accumulated on roads, trees, and power lines. There were significant disruptions to traffic as vehicles skidded off roads. At Montgomery Airport, 0.25 inches of freezing rain was measured. This precipitation was caused by a low pressure system that developed over Texas and moved northeast, passing just west of the local area during Saturday afternoon.

NYZ067>071 Orange - Putnam - Rockland - Northern Westchester - Southern Westchester

As a strong high pressure system moved east-southeast just north of Northern New England, a low pressure system developed southwest of the area.

A narrow band of light freezing rain changed to sleet and snow with the passage of an arctic cold front during Wednesday afternoon, January 13th. Northeast winds transported a cold shallow airmass that caused temperatures to fall from the 50s into the 20s within 6 hours of its' passage.

A 12 to 18 hour period of light snow preceded the developing storm as warmer air was forced above the cold arctic airmass. Wind chills ranged from 15 to 25 degrees below 0 as northeast winds of 15 to 25 mph combined with temperatures in the teens along the coast and from 0 to 10 degrees above 0 inland.

As the low developed, warmer air was drawn into the system causing the snow to mix with sleet and freezing rain. A prolonged period of freezing rain occurred from the NYC Metro Area north. Significant icing caused widespread disruptions to mass transit and traffic. Interstate 84 near Greenville Mountain in Middletown (Orange County) and Rte.22 in Bedford (N. Westchester County) were forced to close due to significant icing. Ice also accumulated on trees and power lines and caused significant power outages in Orange and Putnam Counties.

Icing occurred in pockets across New York City and northern parts of Nassau and Suffolk Counties. Icing downed scattered tree limbs across this region.

Heavy rain showers along with wind gusts from 30 to 40 mph occurred from 9:00 am to 9:30 am along the Long Island Sound shore of Westchester County and Northern Nassau and Suffolk Counties. This downed additional scattered ice-laden tree limbs that caused some power outages.

Suffolk County

Lindenhurst to Bay Shr	15	0855EST	0	0	Flood
Nassau County					
Valley Stream	15	0900EST	0	0	Flood
Richmond County					
South Beach	15	0915EST	0	0	Flood

As heavy rain fell on a frozen ground surface with partially clogged storm drains, widespread flash flooding of low-lying and poor drainage areas occurred across the region.

In Suffolk County, up to 3 feet of water collected on low-lying roads from Lindenhurst to Bay Shore.

In Nassau County, a portion of Valley Stream Blvd. north of Village Green was washed away.

In Staten Island, up to 2 feet of water collected in many streets in South Beach.

		Time	Path	Path Number of		er of	Estimated		January 1999		
		Local/	Length	Width	Perso	ons	Damage			January 1999	
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm		

ADDITIONS/CORRECTIONS

NEW YORK, Coastal

Rainfall amounts ranged from 1.16 inches at Westhampton to 1.74 inches at Farmingdale.

18	1515EST	0	0	Lightning
18	1747EST	0	0	Thunderstorm Wind (G52)
18	1800EST	0	1	Thunderstorm Wind (G50)
18	1816EST	0	0	Thunderstorm Wind (G54)
18	1925EST	0	0	Thunderstorm Wind (G75)
	18 18 18	18 1747EST 18 1800EST 18 1816EST	18 1747EST 0 18 1800EST 0 18 1816EST 0	18 1747EST 0 0 18 1800EST 0 1 18 1816EST 0 0

Thunderstorms and heavy showers occurred ahead of an approaching cold front.

In Oakwood, lightning struck the chimney of a house that ignited a fire. Damage occurred to the chimney, kitchen, and living room.

Thunderstorms produced a brief period of high winds and torrential rain across the region.

In Queens, high winds caused a tree to fall on a car that injured a woman.

In Bridgehampton, the National Weather Service confirmed that a strong microburst occurred near the intersection of Mecox Road and Horsemill Lane. This microburst exploded a greenhouse and scattered the debris about 200 yards to the north. In addition, a large tree, totally leafless, was uprooted right near the Greenhouse and several large trees and limbs were blown over in the immediate vicinity all falling in the same direction. Elsewhere in Suffolk County, many trees were downed from Sayville east through Riverhead.

A brief period of torrential rain caused minor flooding of low-lying and poor drainage areas, especially streets.

Orange County			
Goshen to Highland Mills	24	0926EST	

Thunderstorm Wind (G52)

A line of severe thunderstorms produced high winds that downed trees from Goshen east to Highland Mills. Some trees fell on cars at the intersection of Hollis Street and Park Ave. in Highland Mills.

Reference Notes:

Fatality Location Abbreviations:

BFBall Field MH Mobile Home BO **Boating** OT Other BU **Business** OU Outside/Open Areas CA Camping PH Permanent Home EQ Heavy Equipment/Construction SC School GF Golfing TE Telephone In Water Under Tree IW UT LS Long Span Roof VE Vehicle

List of Acronyms:

WCM - Warning Coordination Meteorologist

NWS - National Weather Service

NOAA - National Oceanic and Atmospheric Administration

Other Notes:

When listing wind speed values under "Character of Storm", ex. High Wind (G81), the G indicates a "Gust" which is a peak 5-second averaged wind speed in Knots (kts). 1 kt. = 1.152 mph.

When listing hail size under "Character of Storm", ex. Hail (2.25), the hail size is given in inches and hundredths of inches.

When listing property and crop damage, the figures indicated are the best guess made by the NWS from the available sources of information at the time of the printing.

The Saffir-Simpson Scale

Category One Hurricane:

Winds 74-95 mph (64-82 kt or 119-153 kph). Storm surge generally 4-5 ft above normal. No real damage to building structures. Damage primarily to unanchored mobile homes, shrubbery, and trees. Some damage to poorly constructed signs. Also, some coastal road flooding and minor pier damage.

Category Two Hurricane:

Winds 96-110 mph (83-95 kt or 154-177 kph). Storm surge generally 6-8 feet above normal. Some roofing material, door, and window damage of buildings. Considerable damage to shrubbery and trees with some trees blown down. Considerable damage to mobile homes, poorly constructed signs, and piers. Coastal and low-lying escape routes flood 2-4 hours before arrival of the hurricane center. Small craft in unprotected anchorages break moorings.

Category Three Hurricane:

Winds 111-130 mph (96-113 kt or 178-209 kph). Storm surge generally 9-12 ft above normal. Some structural damage to small residences and utility buildings with a minor amount of curtainwall failures. Damage to shrubbery and trees with foliage blown off trees and large tress blown down. Mobile homes and poorly constructed signs are destroyed. Low-lying escape routes are cut by rising water 3-5 hours before arrival of the hurricane center. Flooding near the coast destroys smaller structures with larger structures damaged by battering of floating debris. Terrain continuously lower than 5 ft above mean sea level may be flooded inland 8 miles (13 km) or more. Evacuation of low-lying residences with several blocks of the shoreline may be required.

Category Four Hurricane:

Winds 131-155 mph (114-135 kt or 210-249 kph). Storm surge generally 13-18 ft above normal. More extensive curtainwall failures with some complete roof structure failures on small residences. Shrubs, trees, and all signs are blown down. Complete destruction of mobile homes. Extensive damage to doors and windows. Low-lying escape routes may be cut by rising water 3-5 hours before arrival of the hurricane center. Major damage to lower floors of structures near the shore. Terrain lower than 10 ft above sea level may be flooded requiring massive evacuation of residential areas as far inland as 6 miles (10 km).

Category Five Hurricane:

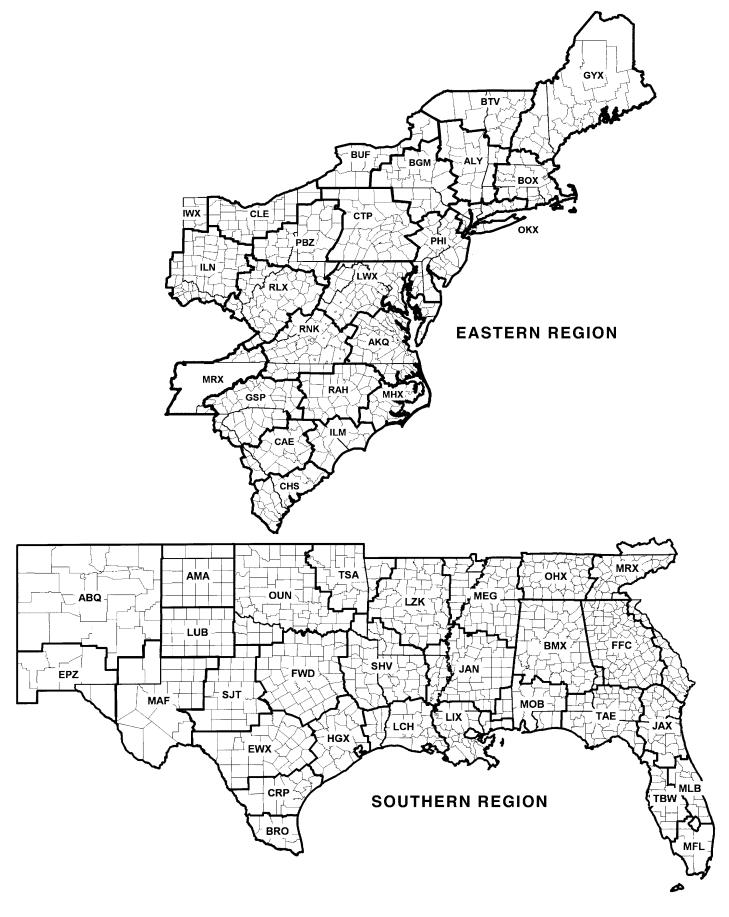
Winds greater than 155 mph (135 kt or 249 kph). Storm surge generally greater than 18 ft above normal. Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown over or away. All shrubs, trees, and signs blown down. Complete destructon of mobile homes. Severe and extensive window and door damage. Low-lying escape routes are cut by rising water 3-5 hours before arrival of the hurricane center. Major damage to lower floors of all structures located less than 15 ft above sea level and within 500 yards of the shoreline. Massive evacuation of residential areas on low ground within 5-10 miles (8-16 km) of the shoreline may be required.

The Fujita Scale

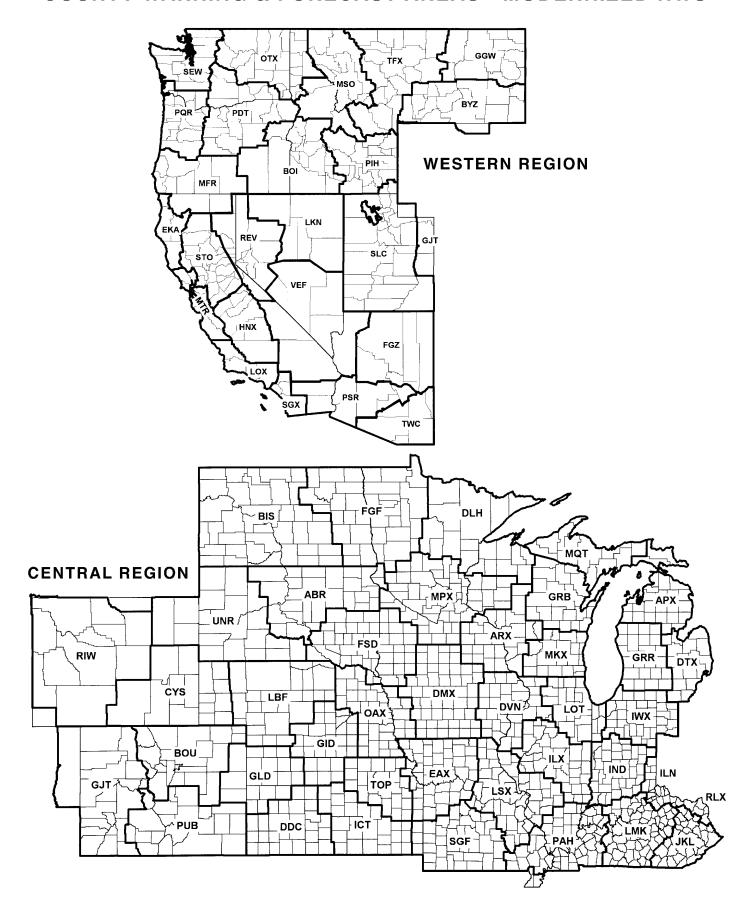
F-Scale	Intensity	Wind Speed (mph)	Typical Damage	F2
F0	Gale Tornado	40 - 72	Some damage to chimneys; breaks branches off trees; pushes over shallow-rooted trees; damages sign boards.	AET
F1	Moderate	73 - 112	The lower limit is the beginning of hurricane wind speed; peels surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off the roads; attached garages may be destroyed.	F3
F2	Significant	113 - 157	Considerable damage. Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light object missiles generated.	
F3	Severe	158 - 206	Roof and some walls torn off well constructed houses; trains overturned; most trees in fores uprooted	
F4	Devastating	207 - 260	Well-constructed houses leveled; structures with weak foundations blown off some distance; cars thrown and large missiles generated.	
F5	Incredible	261 - 318	Strong frame houses lifted off foundations and carried considerable distances to disintegrate; automobile sized missiles fly through the air in excess of 100 meters; trees debarked; steel re-inforced concrete structures badly damaged.	F5
F6	Inconceivable	319 - 379	These winds are very unlikely. The small area of damage they might produce would probably not be recognizable along with the mess produced by F4 and F5 wind that would surround the F6 winds.	

 $[\]mbox{*}$ From the Journal of Atmospheric Science, August 1981, p. 1517-1519

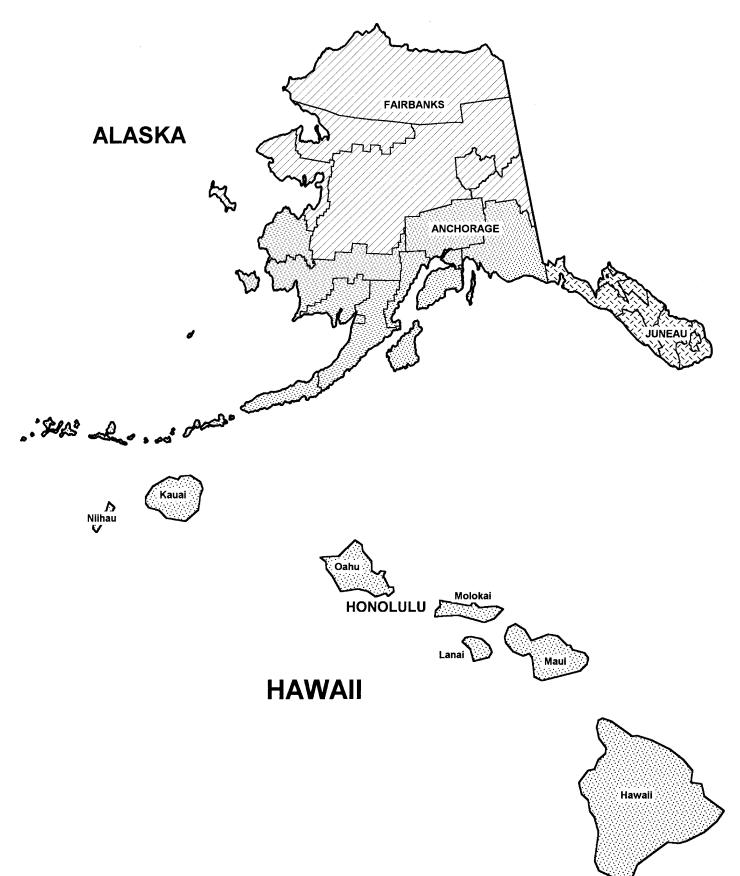
COUNTY WARNING & FORECAST AREAS - MODERNIZED NWS



COUNTY WARNING & FORECAST AREAS - MODERNIZED NWS



MODERNIZED COUNTY WARNING AREAS



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